

GERRY E. STUDDS  
10TH DISTRICT, MASSACHUSETTS



COMMITTEE  
MERCHANT MARINE AND FISHERIES  
CHAIRMAN  
SUBCOMMITTEE ON FISHERIES AND WILDLIFE  
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SELECT COMMITTEE ON AGING

Congress of the United States  
House of Representatives

September 15, 1992

WASHINGTON  
227 CANNON HOUSE OFFICE BUILDING  
WASHINGTON, DC 20515-2110  
202-225-3111

GREATER NEW BEDFORD  
POST OFFICE BUILDING  
NEW BEDFORD, MA 02140  
508-999-1251

SOUTH SHORE  
BARSTOW'S LANDING, SUITE 8  
TWO COLUMBIA ROAD (ROUTE 53)  
PEMBROKE, MA 02359  
617-826-3866

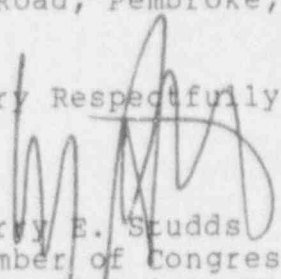
CAPE AND ISLANDS  
186 MAIN STREET  
HYANNIS, MA 02601  
508-771-0566

Respectfully referred to:

Dennis K. Rathbun  
Director, Congressional Affairs  
Office of Government and Public Affairs  
Nuclear Regulatory Commission  
Washington, DC 20555

I am contacting you on behalf of Mary Elizabeth Lampert  
whose correspondence is attached. I would appreciate your  
response to Ms. Lampert's questions. Please reply to my  
district office at 2 Columbia Road, Pembroke, MA 02359,  
att'n: Mary Lou Butler.

Very Respectfully,

  
Gerry E. Studds  
Member of Congress  
10th District, MA

Enclosure

GERRY E. STUDDS  
10TH DISTRICT, MASSACHUSETTS

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237 CANNON HOUSE OFFICE BUILDING  
WASHINGTON, DC 20515-2110  
202-225-3111

GREATER NEW BEDFORD  
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New Bedford, MA 02740  
508-999-1251

SOUTH SHORE  
BARTON'S LANDING, SUITE B  
Two Columbia Road (Route 53)  
Pembroke, MA 02359  
508-825-3886

CAPE AND ISLANDS  
148 Main Street  
Hennings, MA 02601  
508-771-0966

September 15, 1992

Dear Ms. Lampert:

Thank you for your most recent letter about the Pilgrim Station. I appreciate your insights and admire your diligence in monitoring the plant.

I have brought your questions, along with an expression of my interest in these concerns, to the attention of an official of the Nuclear Regulatory Commission. As soon as I hear back from that agency, I will be in touch with you.

Warm personal regards.

Sincerely,

Gerry E. Studds

Ms. Mary Elizabeth Lampert  
148 Washington Street  
Duxbury, MA 02332

148 Washington Street  
Duxbury, Massachusetts  
August 31, 1992

Representative Gerry Studds  
2 Columbia Road  
Pembroke, MA 02359

Dear Representative Studds,

I am writing in regard to the three current issues of safety (faulty Rosemont transmitters; faulty reactor vessel water level instrumentation; failure of Thermo-Lag fire barrier material to pass fire endurance tests) and as they relate to the Pilgrim Nuclear Power Plant in Plymouth, Massachusetts.

Last Saturday, August 29, The NRC came to Plymouth and held a public hearing on these issues. I attended the meeting and enclosed you will find a list of questions. I would appreciate your office forwarding these questions on to the NRC; as, I feel they are more apt to be given the prompt and serious attention they deserve, if they come from your office. Additionally, I trust you will find them useful as a basis for an update to your letter to Chairman Selin of July 31, 1992.

Thank you for your continued support on these matters of such serious concern to the residents of Southeastern Massachusetts.

Sincerely,

*Mary Elizabeth Lampert*

Mary Elizabeth Lampert  
Chairman, Duxbury Nuclear Advisory  
Committee

148 Washington Street  
Duxbury, Massachusetts 02332  
August 31, 1992

Thomas T. Martin  
Regional Administrator  
Nuclear Regulatory Commission  
Region 1  
475 Allendale Road  
King of Prussia, PA 19406-1415

Re: QUESTIONS REMAINING AFTER NUCLEAR REGULATORY  
COMMISSION PUBLIC MEETING HELD AT PLYMOUTH, MASS.  
AUGUST 29, 1992

Dear Mr. Martin:

Last Saturday, August 29, 1992, you and other  
representatives of the U.S. Nuclear Regulatory Commission met  
with concerned members of the public regarding three current  
issues of safety:

1. Faulty Rosemont Transmitters
2. Faulty Reactor Vessel Water Level Instrumentation
3. Failure of Thermo-Lag Fire Barrier Material to  
Pass Fire Endurance Tests

We greatly appreciated the information furnished at the  
meeting. In reviewing both materials handed out by the NRC  
at the meeting, and extensive notes on various matters  
discussed, we remain somewhat unclear on a few matters. To  
this end, we ask the Nuclear Regulatory Commission to  
promptly answer each of the following questions.

To insure that there is no misunderstanding of the question  
or answer, we ask that each question be answered in the  
format presented; if the NRC staff feels that further  
explanation is required, this can be noted in the format  
provided.

## I. Rosemont Transmitters

The Background Information provided by the NRC for the public meeting said that the first indication of the problem with Rosemont transmitters occurred on March 25, 1988, and that the problem was caused by loss of fluid. The NRC also said that seventy three Rosemont transmitters (six of which have been found to be faulty and were replaced) are used at Pilgrim, and that a safety inspection in May of 1990 concluded that "an effective program for identifying and tracking performance of transmitters has been implemented" at Pilgrim. We have the following questions:

1. Are all known failures and instances of faulty performance (at Pilgrim and elsewhere) caused only by fluid loss?

<u>      </u> Yes	<u>      </u> No	<u>      </u> See Explan.
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2. If not, has the cause of each failure been identified?

<u>      </u> Yes	<u>      </u> No	<u>      </u> See Explan.
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3. Is there is more than one computer program for "tracking performance."

<u>      </u> Yes	<u>      </u> No	<u>      </u> See Explan.
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4. If the answer to Question 3 is anything but an unqualified "No", what program is used at Pilgrim?  
Answer: \_\_\_\_\_  
\_\_\_\_\_
5. Have any failures or instances of faulty performance of Rosemont transmitters been noted at Pilgrim Station since May of 1990?

<u>      </u> Yes	<u>      </u> No	<u>      </u> See Explan.
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6. If the answer to Question 5 is anything but an unqualified "No",
  - a. how many occurrences? \_\_\_\_\_ (insert number)
  - b. Involving how many transmitters? \_\_\_\_\_ (insert number)

## II. Water Level Instrumentation

There have been a number of instances of faulty readings of the instrumentation used to determine the water level in boiling water reactors, of the type used at Pilgrim. For example, according to NRC Report 50-293, sensed high reactor water levels caused primary containment isolation system (PCIS) isolations on March 26, 1992, and again on March 27, 1992. The NRC report attributed these PCIS isolations to faulty instrument readings (e.g., "spiking") during rapid depressurization, and, after system modifications were made, permitted reactor restart on April 8, 1992. We have the following questions:

7. Have there been any reactor vessel depressurizations at Pilgrim Station since April 8, 1992?

<u>Yes</u>	<u>No</u>	<u>See Explan.</u>
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8. Have there been any PCIS isolations at Pilgrim Station since April 8, 1992?

<u>Yes</u>	<u>No</u>	<u>See Explan.</u>
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9. If the answer to either Question 7 or Question 8 is other than an unqualified "No", have any of the PCIS isolations

- i. occurred during rapid depressurizations?

<u>Yes</u>	<u>No</u>	<u>See Explan.</u>
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- ii. been the result of water level instrumentation readings?

<u>Yes</u>	<u>No</u>	<u>See Explan.</u>
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10. The background material handed out by the NRC at the public meeting said that an error in more than one reference leg was unlikely.

Is it true that there were errors in both the "A" and "B" legs of Pilgrim on March 27?

<u>Yes</u>	<u>No</u>	<u>See Explan.</u>
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11. If the answer to question 11 is anything except an unqualified "No", on how many instances has there been a level indication error in more than one reference leg

a. At Pilgrim? \_\_\_\_\_ (insert number)

b. At the other boiling water reactors under the supervision of the NRC? \_\_\_\_\_ (insert number)

12. Has the "spiking" phenomena been observed at Pilgrim (or any other boiling water reactor) except (1) during reactor depressurization and (2) at pressures of about 450 psig?

Yes No See Explan.

13. If the answer to Question 12 is anything except an unqualified "No", are the thermodynamic conditions in every instance at which "spiking" been observed such that the entire observed spike could be attributed to condensed or dissolved gases coming rapidly out of solution?

Yes No See Explan.

14. I understand that a preliminary analysis by General Electric concluded that the potential error in water level readings due to condensible gases coming out of solution is about 4". Is my understanding correct?

Yes No See Explan.

15. During the March 1992 PCIS at Pilgrim, the "spiking" of water level indications was much more than 4". Has the NRC attributed "spiking" to anything other than dissolved gases coming out of solution?

Yes No See Explan.

16. If the answer to question 15 is "Yes", to what causes other than dissolved gases does the NRC attribute the "spiking", and what has been done to eliminate each such cause?

Please attach a complete explanation.

17. Would NRC regulations require Pilgrim station to shut down if the reactor water level instrumentation was completely inoperative?

Yes   No   See Explan.

### III. Thermo-Lag

The NRC Background Material provided at the August 29 meeting said that Thermo-Lag 330 is a fire barrier system used in many nuclear power plants, and that potential problems with Thermo-Lag date back to 1987. We have the following questions.

18. Is there any Thermo-Lag fire barrier material (of any type, not simply Thermo-Lag 330) at Pilgrim?

Yes   No   See Explan.

19. Has all fire barrier material at Pilgrim been tested to see if it meets the NRC 3-hour minimum fire resistance rating required by the NRC?

Yes   No   See Explan.

20. Has the NRC ever been notified that any fire barrier material of any type used at Pilgrim may not meet the NRC 3-hour minimum fire resistance rating?

Yes   No   See Explan.



21. Does all the fire barrier material used at Pilgrim meet the NRC 3-Hour minimum fire resistance rating?

Yes No See Explan.

22. If the answer to Question 21 is anything except an unqualified "Yes", is all fire barrier material used at Pilgrim that does not meet the NRC 3-hour minimum fire resistance rating used in conjunction with an automatic fire detection and suppression system?

Yes No See Explan.

Thank you for your interest in these matters. We appreciated having NRC technical staff in Plymouth to answer questions; but, wished some of those technical people had also attended the prior hearings in Washington.

Once again, we express disappointment in your response to our requests (and similar requests from the Plymouth Selectman) for NRC resident inspectors at Pilgrim to be onsite at all times. Your response seems to ignore that emergency planning is not in place and that other long standing safety issues remain unresolved such as:

- storage of hydrogen at Pilgrim too close to the reactor
- inadequacies of stack monitoring as pointed out by Alfred Schmidt in his 1992 EPA comment
- overcrowding of spent fuel rods
- unfiltered, direct torus vent... etc

The multiplicity of problems and failure of your agency to acknowledge and "fix" them in a timely manner erodes our confidence in your commitment to protecting our safety.

We look forward to a quick response to our questions and in the format provided.

Sincerely,



Mary Elizabeth Lampert  
Chairman, Duxbury Nuclear Advisory  
Committee