

ONE HUNDRED ELEVENTH CONGRESS  
**Congress of the United States**  
**House of Representatives**  
COMMITTEE ON ENERGY AND COMMERCE  
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July 15, 2010

The Honorable Gregory Jaczko  
Chairman  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Chairman Jaczko:

I write in regard to the recent discovery of radioactive tritium contamination near the Pilgrim Nuclear Station in Plymouth, Massachusetts that was reported yesterday in the *Boston Globe*.<sup>1</sup> Sadly this appears to be just another in a long line of failures of buried piping systems at our nation's nuclear plants.

This lack of a serious and comprehensive Nuclear Regulatory Commission (NRC) inspection regime for buried piping systems has long been a concern of mine, and this is not the first time I have written the Commission about this issue.<sup>2</sup> In January – in light of the increasing number ( $\geq 32$ ) of plants with tritium leaks,<sup>3</sup> and the NRC's inadequate response to my concerns<sup>4</sup> – I requested an investigation of the situation by the Government Accountability Office (GAO).<sup>5</sup> I was joined in that request by Reps. Hall (NY), Adler (NJ) and Welch (VT), all of whom have leaking plants in their districts. This investigation is currently underway and I look forward to learning its results this fall.

In the meantime, however, plants continue to operate, to age, and to experience further corrosion. The possibility that there are buried pipes leaking tritium at Pilgrim is not surprising. After all, the plant is almost 40 years old and located in a corrosive near shore environment. The current inspection regime for buried pipes – physical inspections conducted only in those rare instances when pipes are dug out for other purposes – is incapable of ensuring the integrity of decades-old

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<sup>1</sup> "Tritium detected at Pilgrim N-plant" by Carolyn Y. Johnson in *The Boston Globe*, 14 July 2010.

<sup>2</sup> Letter from Reps. Markey and Hall to the NRC, 30 April 2009. Text here:

[http://markey.house.gov/index.php?option=com\\_content&task=view&id=3715&Itemid=141](http://markey.house.gov/index.php?option=com_content&task=view&id=3715&Itemid=141)

<sup>3</sup> <http://www.nrc.gov/reactors/operating/ops-experience/tritium/sites-grndwtr-contam.html>

<sup>4</sup> Rep. Markey press release on NRC response to Markey-Hall letter, 2 July 2009. Text here:

[http://markey.house.gov/index.php?option=com\\_content&task=view&id=3752&Itemid=141](http://markey.house.gov/index.php?option=com_content&task=view&id=3752&Itemid=141)

<sup>5</sup> Press release of 13 January 2010 GAO investigation request by Reps. Markey, Hall, Adler [Welch added at a later date] can be found at: [http://markey.house.gov/index.php?option=com\\_content&task=view&id=3829&Itemid=141](http://markey.house.gov/index.php?option=com_content&task=view&id=3829&Itemid=141)

pipng systems. While I realize that such inspection poses unique challenges due to accessibility and cost issues, those hurdles do not render these pipes immune from corrosion or damage, nor do they obviate the need for comprehensive inspections to ensure both operational and environmental integrity.

This matter is even more critical in light of Entergy's application to extend Pilgrim's operating license past 2012 for another 20 years. I would like to remind you that this same licensee admitted to misleading state regulators and lawmakers about their Vermont Yankee nuclear plant's buried pipes and subsequent tritium leak. Earlier this year when Massachusetts Governor Deval Patrick noted design similarities between Pilgrim and Vermont Yankee and suggested the possibility that Pilgrim could also suffer from tritium leaks, Pilgrim spokesman called that argument "kind of a leap." Gov. Patrick's words now appear prescient.

Ralph Andersen, speaking for the trade association Nuclear Energy Institute, claimed that the detection of tritium in Pilgrim's monitoring wells was evidence the system was working. I disagree. "The system" should work by identifying potential failures of components *before* they break and release unknown volumes of radioactive water into our environment. Other industries have figured out how to inspect their buried pipes in a proactive and comprehensive fashion. How many more failures does the nuclear industry and the NRC need before they admit that aging buried systems need additional attention?

Thank you for your consideration of this matter. Should you have any questions, please contact Dr. Katie Matthews or Dr. Michal Freedhoff of my staff at 202-225-2836.

Sincerely,



Edward J. Markey

Chairman

Subcommittee on Energy and  
The Environment