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April 23, 2018

The Honorable Kristine L. Svinicki
Chairman
Nuclear Regulatory Commission
Mail Stop O-16G4
Washington, DC 20555-0001

Dear Chairman Svinicki,

I write to express my serious concerns over the reported plan of Pilgrim Nuclear Power Station (“Pilgrim”) to store its spent radioactive nuclear fuel in more than 60 dry casks in an area just 200 feet from the Plymouth Bay shoreline and only 25 feet above sea level. This plan reinforces the concerns I also have about future Nuclear Regulatory Commission (NRC) regulations governing decommissioned nuclear plants.

As plants like Pilgrim shutter across the nation and plan to store spent nuclear fuel on site for years — even decades — to come, it is imperative that these plants and the NRC regulations fully consider the impacts of climate change on dangerous nuclear waste. The NRC regulations must ensure that dry casks are not vulnerable to flooding, corrosion, and other damage, especially as climate change contributes to rising sea levels and increasingly severe and unpredictable storms.

Following a March 21, 2018 oversight hearing in the Senate Environment and Public Works Committee, I submitted questions about this very issue: how and whether climate change projections are integrated into the NRC’s safety standards and how they will be included in the NRC’s forthcoming rule governing decommissioned nuclear plants. It is essential that the NRC take climate change impacts into account in these regulations to ensure that fuel sites and dry casks are kept safe at decommissioned nuclear sites for the foreseeable future. Unfortunately, I have not yet received a reply to my questions following this hearing.

Over the past few months, devastating winter storms have repeatedly hit Massachusetts, causing flooding and damage to coastal towns. Residents living near the Pilgrim site are concerned that Entergy Corp., the corporation that owns Pilgrim, and the NRC are not taking climate change, flooding, and other environmental threats into sufficient consideration when evaluating the safety of spent nuclear fuel stored onsite at the plant.

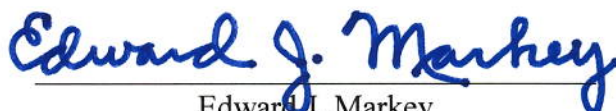
This uncertainty is especially alarming because the fuel could remain in these dry casks for a significant and indeterminate amount of time. When asked how long the radioactive fuel could remain at the Plymouth site, a senior Entergy official replied that he does not “have a crystal ball.”¹

Therefore, in addition to responses to my post-hearing questions, I would like answers to the following by April 30, 2018:

1. What time span and which climate models are used for the post-Fukushima flooding reevaluation? How will the NRC incorporate those models into the regulations governing decommissioned nuclear plants?
2. What is the protocol for continual monitoring of spent fuel sites? How is climate change being integrated into that protocol and into regulations governing decommissioned plants?
3. A spokesman recently made public statements to the Boston Globe indicating that the NRC is not concerned about dry casks if submerged in sea water. What research has the NRC done on possible corrosion of the dry casks by exposure to saltwater?
4. Because Pilgrim received an exemption from the seismic probabilistic risk assessment, how is the NRC assured that the dry casks will be safe from seismic activity? How will such risks be incorporated into the rule governing decommissioned plants, and will any decommissioned plants receive similar exemptions?

As the sponsor of the Dry Cask Storage Act, I have long advocated for the proper storage of spent nuclear fuels. The NRC has a responsibility to ensure that local communities and the American people are fully protected as nuclear plants shutter. To achieve this goal, the NRC must take the inevitable impacts of climate change into account when evaluating procedures for indefinitely storing used nuclear fuel at these sites. I look forward to your prompt reply to these concerns, and appreciate your attention to this serious matter.

Sincerely,



Edward J. Markey
United States Senator

¹ David Abel, *Pilgrim officials consider moving nuclear waste to higher ground*, Boston Globe (April 20, 2018), <https://www.bostonglobe.com/metro/2018/04/20/seas-rise-pilgrim-mulls-moving-its-nuclear-waste-higher-ground/rcrkilSqo4cGpfledFyrJJ/story.html>.