



Decommissioning and Emergency Planning for Nuclear Power

There have been five nuclear power reactor accidents in 35 years: Three Mile Island, Chernobyl and three at Fukushima. Three of the accidents were at reactors like Entergy's Pilgrim Nuclear Power Station in Plymouth, a design the Nuclear Regulatory Commission (NRC) recognized is flawed.

Pilgrim Nuclear Is Dangerous

In the midst of a high level safety inspection of Pilgrim by the Nuclear Regulatory Commission (NRC) in November 2016, an internal communication by the lead NRC inspector was made public. This document was highly critical of the conditions within Pilgrim and of the ineffective safety culture there. Some of the deficiencies include:

- Failure of plant workers to follow established industry procedures
- Broken equipment that never gets properly fixed
- Lack of required expertise among plant experts
- Failure of some staff to understand their roles and responsibilities
- **"We are observing current indications of a safety culture problem that a bunch of talking probably won't fix."**

Even if the NRC closes Pilgrim sooner than the expected 2019 date, the plant will pose a safety threat for decades to come. We can't rely on the NRC to keep us safe. We are counting on our elected officials to do everything they can to ensure the safety of our citizens during this time.

Shortly after the release of the highly critical NRC internal status report on safety issues at Pilgrim, three of the 8 main steam isolation valves failed, resulting in a controlled shut down of reactor, and serving to emphasize the inadequate state of safety there. Public Safety is not a partisan issue.



If Pilgrim Nuclear Power Station (PNPS) were to have an accident, the economic impact in Massachusetts could be on the order of \$1 trillion and more. The radioactive plume from Fukushima's nuclear accident in Japan in 2011 carried significantly farther than 50 miles. Three-quarters of the state's economy and property value lies within 50 miles of PNPS, which the US Nuclear Regulatory Commission (NRC) has now listed at the lowest of its operating reactor ratings.

Pilgrim's decommissioning fund is inadequate.

It has \$725.41 million (2012), \$500 million less than the \$1.23 billion estimated to decommission smaller Vermont Yankee. If there is not enough money, the reactor will be mothballed up to 60 years. During that time the workforce is reduced to a skeleton, offsite emergency planning eliminated, and offsite environmental monitoring eliminated or reduced. If Entergy (a limited liability company) skips town, we are left holding the bag, along with tons of radioactive waste.

We should accelerate the decommissioning of Pilgrim to reduce these economic risks as quickly as possible. Ensure this effort is adequately funded before Pilgrim stops operation so the decommissioning can occur soon thereafter, before the trained workforce finds employment elsewhere. The Nuclear Regulatory Commission provides, in their words, only a "generic decommissioning estimate," and doesn't require a site-specific funding estimate. Generic costs understate the cost of work of this nature in New England. Not only are our electricity costs higher in New England, so are our costs of dismantling a nuclear reactor.

Vermont Yankee Nuclear Power Station provides a much more comparable estimate of dismantling costs. Reports from Vermont Yankee indicate that the Pilgrim Nuclear decommissioning fund is at least \$500 million short. For example, Vermont Yankee's cost estimate grew 70% between 2007 and 2014. So the more time that passes, the larger the deficit will likely grow between the trust fund balance and the real cost of dismantling. The recent letter to the NRC signed by all 11 members of the Massachusetts delegation to the US Congress asks to "ensure the adequacy of Entergy's decommissioning fund for Pilgrim in order to enable the quick decommissioning and remediation of the site so it can be used for other purposes."

Join us in calling on Governor Baker and our State Legislature to adopt energy policy that stops fossil fuel subsidies, supports local renewable energy resources, keeps energy dollars in our communities, creates good green jobs and protects our Commonwealth from climate change and life-threatening pollution.

Important Bills this session

SD.1222 An Act relative to the prompt decommissioning of nuclear power stations - Sen. deMacedo - South Shore

HD.149 An Act increasing nuclear power plant protections to a twenty mile radius - Rep. Cantwell - Marshfield

HD.59 An Act relative to radiological emergency response funds - Rep. Cutler - Duxbury

SD.2009 An Act relative to responsible emergency planning at nuclear power plants Sen. Cyr - Cape & Islands

HD.2819 An Act relative to nuclear power plant protections Rep. Peake - Provincetown

HD.2823 An Act relative to emergency planning Rep. Peake - Provincetown