

**DUXBURY NUCLEAR ADVISORY COMMITTEE
REPORT TO SELECTMEN, NOVEMBER 23, 2015**

ENTERGY TO CLOSE PILGRIM NO LATER THAN JUNE 1, 2019- IMPLICATIONS

Entergy's VP Mohl announced on October 13, 2015 that Pilgrim will shut no later than June 1, 2019 because the unit is losing about \$40 million annually with little chance that its economics will improve in the foreseeable future. Entergy will decide by the first half of 2016, after further discussions with grid operator ISO New England on the cost to break its commitment to supply power through June 1, 2019, whether to carry out refueling (a \$70-\$80 million dollar investment) and maintenance scheduled for spring 2017. If a decision is made not to refuel Pilgrim, the reactor would be permanently shut in late 2016 or early 2017, and placed in Safstor (mothballing the reactor, not immediate dismantlement and cleanup), which can last for up to 60 years.

ECONOMICS AND SAFETY

The committee believes that the remaining period before shutdown is a potentially dangerous time. The reactor is 43 years old and, like an antique house, requires maintenance and investments. However Pilgrim has been losing money and has not made necessary investments in the reactor resulting in components breaking and required fixes ignored. This lead to NRC downgrading Pilgrim's safety rating to the lowest rung. Pilgrim and two other reactors Entergy owns in Arkansas are now considered the least safe - placed in Column 4 of the NRC's performance chart. The repairs needed to improve Pilgrim's safety rating would likely cost tens of millions of dollars. Who really believes that Entergy voluntarily will make the necessary investments now?

DECOMMISSIONING

Options

Decommissioning must be completed within 60 years following shutdown. Licensees may choose from three decommissioning strategies: DECON, SAFSTOR, or ENTOMB.

- DECOM is immediate dismantling. Soon after closure, portions of the reactor and facility containing radioactive contaminants are removed to the amount to allow release of the property and termination of the NRC license.

SAFSTOR is "deferred dismantlement" or "mothballing" the reactor up to 60 years. The reactor is maintained and monitored until it is dismantled. It is chosen when: (a) the licensee does not have sufficient funds in its Decommissioning Trust Fund to immediately dismantle the site and is waiting for the fund to grow through investments; and /or(b) there is lack of waste disposal sites. The vast majority of reactors in the US are in SAFSTOR.

Senate Bill S. 1798 was filed, to address this problem and assure taxpayers are not stuck with the bill; it endorsed by Duxbury's ATM, 2015. The Act would require Pilgrim, and any other commercial nuclear reactor in the Commonwealth, to pay an annual \$25,000,000 post-closure funding fee. The fee will be placed in a trust fund in the office of the State Treasurer. After Pilgrim, or any other commercial nuclear reactor in the Commonwealth, has been completely decommissioned, any excess in the fund will be returned to the plant owner, with interest.

Negative Economic Consequences of Delayed Decommissioning for Duxbury

- During Safstor contamination onsite is not identified, and the site will not be cleaned up for decades providing opportunity for the contamination to spread – spread onsite requiring a more expensive cleanup and potentially spread offsite into Cape Cod Bay resulting in economic damage to the area and Commonwealth
- During “SAFSTOR,” workers with specific knowledge of spills and other specific problems will have retired, reducing the likely effectiveness of the cleanup and decommissioning process.
- Offsite emergency planning is eliminated by the NRC after operations cease, placing an unfunded burden on both the state and local communities.
- Contributions to the state for environmental monitoring likely are highly likely to be eliminated after operations cease, again placing an unfunded burden on both the state and local communities.
- Security is decreased, increasing risks and requiring local communities to pay for additional security.
- The site is not restored for productive use, impacting the economy of the region.
- Massachusetts taxpayers will be stuck with any remaining bill; Connecticut taxpayers had to pay over \$480 million shortfall.

POSSIBLE BOS ACTION ITEMS

Action Item 1- Letter to NRC Commission:

We recommend a letter similar to that written by our Congressional delegation³.

Regarding safety during operations: Ask the Commission to ensure that the remaining period during which Pilgrim operates Entergy spends sufficient resources to guarantee safe and secure operations and resolves all the safety issues that got it into Column 4.

Regarding Post-Operations: request that NRC:

- Reject any license application amendment from Entergy that seeks to eliminate applicable offsite emergency planning or security requirements until all spent fuel is removed from the spent fuel pool into safer dry cask storage following the reactor's permanent shutdown.

³ A copy of the delegation letter to the NRC can be found at: <http://www.markey.senate.gov/imo/media/doc/10-13-15MAlettertoNRCPilgrim.pdf>

Two bills expand the state's environmental monitoring around Pilgrim, Seabrook and Vermont Yankee. Reactors release radiation daily into the air and water. MDPH visit to Duxbury to discuss its environmental monitoring program on 11.19.15 showed that the program was on life support and not prioritized by the Baker Administration. Therefore, these two bills are important to provide money so that MDPH can do its job.

- H. 1899 amends the current law to increase Mass. Dept. of Public Health's assessment to licensees from a maximum \$180,000 per year per facility to not less than \$400,000 per facility to allow the department to give the department sufficient funds to perform its testing obligations.
- H.2030 provides \$400,000 to install additional real-time radiation air monitors to supplement the 23 now in the program, the majority clustered in a small arc on Rocky Hill Road, too close to the reactor.

Propose Legislation: Ask our legislators to submit legislation that establishes a Council on Decommissioning. The Council shall include appropriate state and local officials from all impacted communities and citizen groups. The Council shall be involved in oversight of the decommissioning process to ensure economic, safety and environmental needs of the communities are met. Open public meetings shall be held to keep citizens informed.

If you have further questions, please contact the committee.

Respectfully submitted on behalf of the committee,

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Entergy Nuclear Generation Company, LLC - Corporate Structure

Entergy is a web of limited liability companies. The Massachusetts, New York and Vermont AGOs attempted to untangle the assets, revenue streams, and obligations between and among these Entergy subsidiaries LLCs and were stonewalled by NRC and Entergy.

