

## **Recent timeline of Entergy intransigence, NRC coddling, and official neglect re: Pilgrim Nuclear**

*For 13 of the past 29 months, Pilgrim was one of the 9 worst-run reactors in the nation; for the other 16 of those months, it's shared the bottom with 1 to 3 other Entergy reactors. During this time, Pilgrim has experienced SCRAMs, leaked tritium, and impinged many fish. Pilgrim's "Authorization to discharge under the National Pollutant Discharge Elimination System" (NPDES), required under the Clean Water Act, expired 30 years ago and no government body seems to care. MEMA has approved emergency plans that advise Cape Codders to put their heads in the sand. Pilgrim's operator has violated safety regulations, falsified fire watch logs, and ignored the Clean Water Act, non-functioning monitors, serious switchyard problems and security violations. NRC allowed completion of Pilgrim's 40-year license term with insufficient DTF.*

**Who's protecting the public and the environment? Entergy's not doing its job, the NRC isn't doing its job, the EPA, MDEP & MDPS aren't doing their jobs.**

**March 11, 2011: Several GE reactors at Fukushima lost offsite and standby generator power due to a tsunami. Within days, the cores of 3 reactors melted and their containments were breached by explosions, forcing 160,000 people to relocate.** To date none of the melted fuel has been located, most of the evacuees have not returned, and hundreds of tons of radioactive water continue to leak into the Pacific each day. **Pilgrim is the same design as the failed Fukushima reactors; in 1972 the Atomic Energy Commission knew that the Mark 1 containment was incapable of containing a severe accident.**

**March 21, 2011: the NRC issues a 20-year license renewal for Vermont Yankee (also a Mark 1 design).**

**May 22, 2012: Unplanned shutdown (SCRAM) due to increasing condenser pressure.**

**May 25, 2012: NRC extends Pilgrim's operating license for another 20 years despite the triple-meltdown at Fukushima, Chairman Jazcko's opposition, lengthy comments, and objection to the unprecedented situation of the NRC voting to relicense despite pending citizen challenges.**

**January 10, 2013: SCRAM due to stoppage of both recirculation pumps.**

**February 8, 2013: Loss of offsite power (LOOP) and resultant SCRAM.**

**February 10, 2013: Offsite power was restored followed by another LOOP 3 hours later.**

**May 20, 2013: SCRAM due to main turbine auxiliary pump being on fire.**

**Oct. 16, 2013: Pilgrim had 110 safety violations according to a Government Accountability Office report.**

**October 27, 2013: Pilgrim ranks #1 in U.S. for SCRAMs and is one of the 4 worst-run U.S. reactors.**

**February 5, 2014: NRC ranks Pilgrim nuke among nation's the 9 worst-run U.S. reactors.**

**May, 2014: NRC orders Entergy to reevaluate Pilgrim's vulnerability to earthquakes due to new data from the U.S. Geological Survey that shows that seismic risks to Pilgrim are greater than it was licensed for.** Paperwork has since been submitted.

**August, 2014: MDPH report on groundwater testing at Pilgrim shows tritium levels are still trending higher in wells #216, #218, and #219.** Tritium was detected in groundwater at Pilgrim with the first tests in 2007.

**October 25, 2014 through December 10, 2014: fish impingement rates recorded during routine screenwashes averaged 157 fish-per-hour.** Entergy blamed the fish for getting trapped in the Pilgrim's cooling system each time.

**January 26, 2015: NRC reported that Pilgrim will remain among the bottom five plants in the U.S. due to a finding that Entergy had not adequately addressed problems that caused excessive 2013 SCRAMs.**

**January 27, 2015:** during the nor'easter "Juno", Pilgrim experienced a **SCRAM due to Loss Of Offsite Power**; it remained offline for 12 days. An NRC Special Inspection Team sent in 6 days after the LOOP identified **8 violations of federal safety requirements**. The Union of Concerned Scientists issued commentary by Dave Lochbaum on this event entitled **Nuclear Near-Miss at Pilgrim**.

**February 5, 2015:** Entergy submits an event notice to NRC saying a generator that would power instruments measuring levels in seawater intake bays failed during the January storm.

**March 7, 2015: Pilgrim, in column 3, is one of 4 worst-run U.S. reactors;** 2 other Entergy nukes are rated lower, in column 4.

**April 8, 2015:** Entergy reported that **arcing electricity in the switchyard was identified as the root cause** of the Jan. 27 forced shutdown. Similar SCRAMs related to switchyard problems took place twice during a winter storm on Dec. 19 and Dec. 20, 2008.

**May 2015: Entergy's 1996 Clean Water Act NPDES permit became 19 years expired.**

**May 26, 2015: SCRAM** due to loss of condenser vacuum.

**August 22, 2015:** Pilgrim experiences a **SCRAM** due to a valve problem.

**September 2, 2015: NRC downgrades Pilgrim to the bottom of the performance list of the nation's 99 reactors (category 4).** This downgrade is based on numerous forced shutdowns and equipment failures, and is just **one step above mandatory shutdown by federal regulators. Only two other reactors (both Entergy-owned) are in that category at the time.**

**October 1, 2015:** media reports reveal that Pilgrim has posted workers on fire watch after realizing **Entergy never addressed a 1992 federal advisory** regarding remote reactor shutdown. **Vital emergency meteorological information malfunctioned 8 times over 3 years:** if a radiation leak had occurred, operators would have been forced to rely on the National Weather Service in Taunton to provide the meteorological information needed to know which regions were most in danger of fallout. **The NRC found a lack of assurance that Entergy could "protect the health and safety of the public in the event of a radiological emergency."**

**Dec. 4, 2015: Security violations: a federal inspection conducted Oct. 23 found five security violations at Pilgrim.** The NRC withheld details, writing "disclosure to unauthorized individuals could present a security vulnerability". The NRC found that Entergy failed "failed to recognize and plan for the possibility of mistakes, latent issues and inherent risk" and failed "to implement a process of planning, controlling and executing work activities such that nuclear safety was the overriding priority." Inspectors once again criticized Entergy for failing to take corrective actions in a timely manner.

**Feb. 10, 2016: Falsified fire watch logs:** the NRC's Office of Investigations spent a year investigating more than 200 falsified fire watch logs which fraudulently indicated fire watches 'done' between June 2012 and June 2014. Despite the fact that "Fire represents about 50 percent of the core meltdown risk at the typical US reactor – and that's assuming plants comply with safety regulations – management failed to keep watch over the watchman 200 times, leaving us at high risk." said Mary Lampert, president of the citizens group, Pilgrim Watch. Entergy could be hit with a civil fine (up to \$140,000 per day per violation) for the infractions but NRC spokesman Neil Sheehan said "We don't believe at this point it will result in a civil penalty."

**Mar. 7, 2016: NRC employees petition employer to stop ignoring critical safety problem:** Seven engineers who work for the NRC have called on their employer to force nuclear power plant owners to fix a design flaw that could affect emergency core cooling systems. If the flaw is not fixed, they say, the plants should be shut down. The design flaw in the system used to detect electrical supply problems has been known since 2012. "An open phase at a nuclear plant, if not detected and isolated by tripping breakers, could damage the motors of lots of emergency equipment," explained David Lochbaum, director of the Nuclear Safety Program for the Union of Concerned Scientists.