



Gonsalves: Nuke plant debate heating up

By **Sean Gonsalves**
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The ocean temperatures we are beginning to see way up here in New England are getting bathwater-ish.

It's not just setting off alarms for climate change watchers. Mother Nature has a way of catching the attention of even the Nuclear Regulatory Commission, which has been tone-deaf to the concerns of those, near and far, living in the shadows of the Pilgrim Nuclear Power Station.

As Times reporter Christine Legere reported on Thursday, the seawater sucked out of Cape Cod Bay by the nuke plant in Plymouth to help keep the reactors cool and convert steam back into liquid-water exceeded the maximum 75-degree temperature allowed under the plant's recently extended license. It's the first time in Pilgrim's 40-year history this has happened.

The plant's operating license also stipulates that the tons of ocean water Pilgrim uses, even though it can be warmer when it is discharged back into the bay, can't be so warm that it screws up the surrounding ecosystem.

Current protocol calls for the plant to be shut down within 24 hours if water temperatures show no sign of dipping back below the 75-degree limit. On Tuesday night, the cool waters of Cape Cod Bay registered 75.3 degrees and stayed above that level for about 90 minutes. On Wednesday, the temps were north of 75 degrees for 5½ hours, with a high of 75.4 degrees.

Though plant operators had to reduce power in the interim, by Thursday morning Pilgrim was back to 100 percent operating power, as water temps descended below 75 degrees.

A similar type of thing happened at the Millstone 2 nuclear power plant in Connecticut last year, except that plant had to shut down for several days when a summer heat wave tipped the seawater thermometer above the 75-degree limit in Long Island Sound.

And so what's the response of Entergy Corp., owners of the Pilgrim plant?

They're thinking about asking the NRC to amend their operating license to allow for an 80-degree limit on seawater, just like the Millstone 2 owners are currently petitioning the NRC.

I imagine Entergy is going to "consider" it until the NRC rules on the Millstone 2 request, currently under review. Or maybe, the NRC will look at the big picture and simply throw out all the 75-degree limits and make the limit 80 degrees across the board.

Either way, this raises a serious question.

The NRC didn't just grab the 75-degree limit out of thin air.

And you don't have to be a card-carrying member of the anti-Pilgrim group Cape Downwinders to expect that the NRC — and Entergy for that matter — should explain, in a nontechnical way, how and why the 75-degree limit was settled upon in the first place, and what might happen if the limit were raised to 80 degrees?

I mean, now that the climate change deniers/turned climate change skeptics have morphed into there's-nothing-we-can-do-but-adapt-ers, we can all acknowledge that warmer oceans aren't going away any time soon.

Meanwhile, just as Pilgrim's cooling waters were heating up in Cape Cod Bay, the U.S. Department of Energy released a report detailing how rising temperatures, less availability of water, more severe storms and rising seas linked to climate change are not only taking a toll on the nation's energy infrastructure, it's only going to get worse.

The agency highlighted the shutdown of nuclear reactors because of rising seawater temperatures along the Connecticut coast last year and how high temperatures and high energy demand led to a cascading blackout in

Arizona, knocking the San Onofre nuclear plant offline and leaving millions without power.

But that's not it.

Yes, nuke plants must not only contend with the dramatically changing forces of nature, but also with the "invisible hand" of market forces.

Released the same day as the sobering DOE report was a dire industry analysis, authored by Mark Cooper, senior fellow for economic analysis at the Institute for Energy and the Environment at the Vermont Law School.

The Cooper report looked at 11 "risk factors," including competition from cheaper energy sources, falling demand, costly maintenance, pricey retrofit projects and rising operating costs. Relying on industry analytics from Moody's, UBS and Credit Suisse, the Cooper report singled out 12 reactors "at greatest risk of early retirement," which included our very own Pilgrim Nuclear Power Station.

The report, titled "Renaissance in Reverse: Competition Pushes Aging U.S. Nuclear Reactors to the Brink of Economic Abandonment," goes on to observe that "the economic situation for nuclear has always been bad and is unlikely to change."

At this point, there's no use in denying that the changing forces of Mother Nature, converging with the prevailing winds of the market, could become an industry superstorm and force Pilgrim's operators to do what activists and state lawmakers have so far been powerless to achieve: shut it down.

Mary Lampert, chairwoman of the Duxbury Nuclear Advisory Committee and director of the anti-nuke group Pilgrim Watch, was joking when she told the Times the rising temperatures in the bay were "a sign from God that they should shut down."

Lampert is starting to sound more like a prophet. And that's no joke.

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