Miami Herald

FPL wants to keep old reactors running. New sea-rise studies could stand in the way | Miami Herald



Florida Power & Light has asked nuclear regulators to extend the life of its Turkey Point reactors to 2052, but used sea rise projections that fall short of government estimates by 2060 of more than one to two feet. Staff photo by Emily Michot

FPL wants to keep old reactors running. New sea-rise studies could stand in the way By Jenny Staletovich

jstaletovich@miamiherald.com

June 01, 2018 08:45 PM Updated June 03, 2018 03:04 PM

This spring when Florida Power & Light asked nuclear regulators to keep its aging reactors along the shore of Biscayne Bay running another 20 years, the utility used its own dated estimates on sea rise rather than the most recent, and far higher, projections by government agencies.

"Under a worst-case scenario, the plant could safely operate," said spokeswoman Bianca Cruz. "The plant is 20 feet above sea level."

But environmentalists and some residents who have long battled the utility over expansion proposals and previous license extensions jumped on the rising risks of sea-rise this week when the Nuclear Regulatory Commission held its first hearing on the request. They don't see how seaside troubled cooling canals that keep the reactors running — already in the midst of a \$50 million fix after tests showed they polluted the bay and threatened nearby drinking water supplies with an underground saltwater plume — can survive.

"I don't feel that they're putting our welfare above their investors," said Redland resident Pat Milone, who relies on a private well for water and complained that she only learned about the hearing from an environmental group. "This is why Erin Brockovich is still in business."

FPL announced plans to extend the life of the reactors, constructed in the 1970s, after deciding last year to temporarily shelve the construction of two newly approved reactors. If approved by the NRC, the extension would make the reactors among the dozen oldest in the U.S.



An undated aerial view of the Turkey Point cooling canals. Photo courtesy Florida Power & Light

For the extension application, Cruz said the utility recycled a 2013 independent study it commissioned on sea rise for the new reactors. But since then, as climate science has evolved and atmospheric conditions worsened, projections for sea rise have dramatically increased. The U.S. Army Corps of Engineers and the National Oceanic and Atmospheric Administration have all revised projections by 2100 to between 5 feet and 6.75 feet. The FPL estimate presented to the NRC called for just three-quarters of a foot.

"We're confident that through that study we can operate safely," Cruz said. "However, if sea rise grows more rapidly than everyone expects, this is going to be a challenge for everybody, not just the canals or Turkey Point or FPL. We're all going to have to readjust and do the right thing and so if that's something we have to do, we'll do it."

A dam around canals closest to the bay also provide about eight feet of protection against sea rise, said FPL land supervisor Bob Bertelson.

But environmental groups, including Tropical Audubon, Miami Waterkeeper and Friends of the Everglades, aren't convinced and point to unseen threats: creeping underground saltwater that is expected to worsen as seas rise and canal water leaking into Biscayne Bay. They worry that problems in the canals, which FPL continued to deny even after monitoring wells showed canal water spreading, will continue despite clean-up efforts.

VIDEO NOT SHOWN IN PRINT

FPL closes in on license to expand Turkey Point but future still murky

"You can't re-license something if it's not operating as it was licensed," said Laura Reynolds, an environmental consultant representing the groups who worries that a planned fix to add more water to the canals will actually worsen conditions.

Because the state and county oversee conditions in the canals, she said it's possible the canals won't be factored into the NRC licensing decision.

"If they can't require conditions to fix the cooling canal system, they need to tell us the process to fix them," she said. "We all know after a decade of looking at this that those cooling canals are broken. They are not working."

The county, which cited the utility for violating clean water laws, also wants the canals and sea rise projections included in the review.

"We want to make sure the cooling canal system is able to function independently," said Environmental Resources Management division chief Lee Hefty. "So the surrounding land elevations near the cooling canals would be something we think should be looked at."

The county is overseeing a clean-up paid for by rate-payers that includes 10 extraction wells along the canals' western edge that will be used to pump out salty water and act as a barrier to the spreading plume. The utility also filled deep channels dredged in the bay near the canals where tests detected canal water. Filling them is intended to stop the canals from leaking into the bay, which the county is monitoring with regular sampling. In 2016, the state gave the utility 10 years to fix the canals.

But as sea rise projections grow grimmer, environmentalists worry the fixes won't come soon enough.

"Hurricanes are getting bigger, stronger, wetter. We know that's happening," said South Florida Wildlands Association director Matthew Schwartz. "These cooling canals are going to be part of Biscayne Bay very soon."

Public comments on the request will be accepted through June 21 and may be submitted to the NRC by clicking here or mailed to May Ma, Director of Program Management, TWFN-7A60M, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-001

Follow Jenny Staletovich on Twitter @jenstaletovich

Read more here: http://www.miamiherald.com/news/local/environment/article212325259.html#storylink=cpy