

# “...there are no environmental impacts...” But

December 8, 2016



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Florida Power & Light wants to dump radioactive wastewater into the Boulder Zone, which may leak into the aquifer. They say there will be no environmental impacts, but they don't know. Others say it is a bad idea. Read the entire article in the [Miami New Times here:](#)

Comments by OSFR historian Jim Tatum.

-A river is like a life: once taken, it cannot be brought back-

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## FPL Wants to Store Radioactive Waste Under Our Drinking Water Supply

Wednesday, December 7, 2016 at 11:07 a.m.

By [Jerry Iannelli](#)

[miaminewtimes.com/...](#)

Florida is basically one gigantic hunk of porous limestone with pythons, buildings, and Medicare frauds sunning themselves on top. Underneath is South Florida's main source of drinking water, the Biscayne Aquifer, a pristine pool of underground liquid that's become increasingly susceptible to pollution and saltwater intrusion.

Just below that sits another, deeper store of H<sub>2</sub>O called the Floridan Aquifer. Thanks to that porous limestone, water sometimes mixes between the two.

And that's why it's more than a bit alarming that Florida Power & Light (FPL) is pushing ahead with plans to inject radioactive waste into the Floridan Aquifer's lowest zone over the next few decades, after building two new nuclear reactors in South Florida. Environmentalists contend the plan could leak carcinogens such as cesium, strontium 90, and tritium right into South Florida's largest drinking water source.

Last week, a nonprofit environmentalist group that has frequently sparred with FPL, the Citizens Allied for Safe Energy (CASE), filed a formal petition to hold a hearing to stop the utility company's plan. The group filed November 28 – FPL now has 25 days to respond to the complaint.

“Everything will be put into a supposedly ‘hermetically sealed’

boulder zone,” CASE’s president, Barry J. White, says, “but anybody who lives in South Florida knows nothing below us is hermetically sealed.”

An FPL spokesperson, Peter Robbins, provided the following statement to *New Times*:

After an exhaustive and comprehensive review of the proposed Turkey Point Units 6 & 7 project, including the plans to safely use reclaimed water for cooling, the independent Nuclear Regulatory Commission’s staff concluded “...there are no environmental impacts to preclude issuing Combined Licenses to build and operate two reactors next to the existing Turkey Point nuclear power plant.”

We will be reviewing the allegations made by CASE in this document, which was filed after the Environmental Impact Statement was issued, and will respond at the appropriate time. It’s important to note that the system will be closely monitored and is designed to ensure that upward flow from the Floridan aquifer is not taking place.

But the radioactive-waste issue is just the latest flap for the utility monopoly. FPL recently won a yearlong fight to raise customer rates by \$811 million despite turning a \$1.6 billion profit last year. The company [also wasted \\$8 million on a failed plan to deceive voters and make it harder for them to obtain solar panels for their homes.](#)

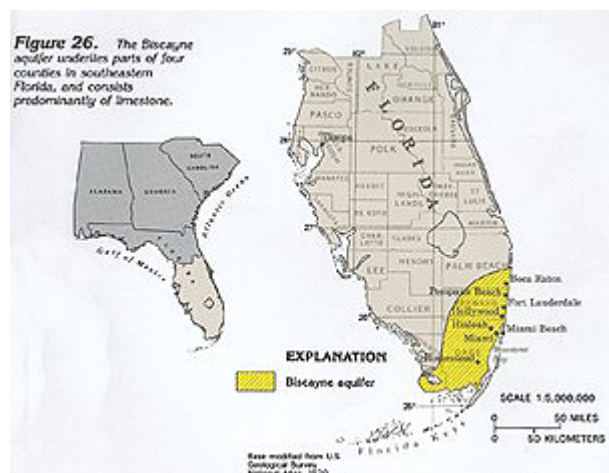
FPL’s parent company also partly owns the Sabal Trail pipeline, which, if built, will controversially run from central Alabama, through Georgia, and down to Orlando. [Protest camps have sprung up in three Florida cities to stop the pipeline’s progress.](#)

The new radioactive-waste fight stems from FPL’s longstanding plan to expand the much-ballyhooed nuclear plant at Turkey Point. The power company – a “legalized monopoly” within Florida

that's long been accused of buying off the state Legislature with campaign cash – wants to build two new reactors, numbers 6 and 7, at the plant over the next decade or two.

Earlier this year, Miami-Dade County officials said Turkey Point is almost certainly leaking radioactive waste into Biscayne Bay, though at levels that most scientists agree is safe for humans. After that news broke, FPL decided to postpone building the new reactors for four more years. That means the [new towers won't be operational until roughly 2030](#).

But the extended timeframe doesn't mean Miamians can stop paying attention to the project. FPL is applying for licenses to build the new towers, as well as crafting a host of plans to get the new wing operational. This includes a review from the U.S. Nuclear Regulatory Commission (NRC), which issued an environmental impact statement in May.



□ As part of that plan, FPL says it plans to stash chemicals used to clean the reactors, as well as “radwaste” – waste that contains radioactive material – inside the so-called boulder zone. The zone, which sits about 3,000 feet below ground, is mostly rocky but does contain saltwater. Miami-Dade County has used the zone before to stash both treated and untreated sewage – but activists say that's no excuse for placing radioactive waste there.

“Two wrongs don’t make a right,” White says. “I’ve always opposed dumping anything there.”

The feds must approve FPL’s plan under a law called the National Environmental Policy Act, which stipulates that governmental agencies must take a “hard look” at any possible risks a plan like FPL’s would pose. (The “hard look” provision is legally vague and sparks frequent fights among environmentalists, energy companies, and the government.) FPL initially applied to build the new reactors in 2009, but the government issued its final Environmental Impact Statement only [this past October](#). The NRC allowed the project to move forward.

But CASE says the government ignored a number of small but frightening details when it comes to storing radioactive waste underground: For one, government documents themselves say the Floridan’s boulder zone could possibly leak into the ocean.

According to CASE’s complaint, the United States Ground Water Atlas, a government document, warns that the boulder zone “is thought to be connected to the Atlantic Ocean, possibly about 25 miles east of Miami, where the sea floor is almost 2,800 feet deep along the Straits of Florida.” CASE’s petition says the NRC failed to address this issue.

“Liquid Radwaste? Into the Boulder Zone?” the petition says. “Our members probably have not even heard of that and, when they do, it will scare the daylight out of them. Even small, diluted amounts of radioactive waste will accumulate and concentrate radiation which is not confined like water and can be absorbed by plant life.”

More frightening, in January 2016, in a hearing related to Turkey Point Reactors 3 and 4, FPL’s own engineer testified that the boulder zone could leak upward into the Biscayne aquifer – AKA, Miami-Dade’s drinking water.

1. ANDERSEN: Yes. I agree with everything Bill is saying. In addition, too, that there is an upward hydraulic gradient from the Floridan [Aquifer] to the Biscayne [Aquifer]. The Floridan is under pressure. Therefore, you have flow from the Floridan into the Biscayne and not vice versa.

Likewise, CASE cited a 2000 University of Miami study that also warned that material injected into the boulder zone can float to the surface.

“Effluent injected from Turkey Point will flow up the surface’s gradient to the northwest and then probably north, where it will have many opportunities to encounter breaks in the permeability barrier in this lateral travel,” the petition says.

CASE says the NRC failed to investigate either of these issues as well.

“Thus, as these two studies show, there is no guarantee that the discharges of harsh chemicals into the boulder zone will stay put,” CASE warns. “It is more likely that they will migrate in all directions and, over time, pose a threat to the entire Biscayne Aquifer, which covers some 4,000 square miles in South Florida.”

White, who wrote the petition, faults FPL for clinging to a 20th-century business model too reliant on fossil fuels and nuclear energy.

“They have ignored the potential of a different business model,” White says. In his petition, he claims that the state could add \$200 million in GDP from renewable energy sources – and that FPL could rake in a huge cut of that money if it commits to building clean energy sources.

CASE also raised three other major issues with the new reactors, including that the two towers might suck far too much freshwater

from the state's aquifers.

"Our organization's whole objective is to return Turkey Point to being a wetland," White says. "We don't need it to be totally clear. They can put solar array down there. I wouldn't even mind if they used gas. But they need to do it without impinging on the needs of the land."

If the NRC doesn't listen, he says, his next step will be to try to get the attention of the Florida Legislature.

"People have injected this waste into the land before, but not into a flowing body of water like this," he says. "How anybody who has an iota of conscience can put radioactive waste into a body of water that humans and animals use, it's like, 'Are you crazy? What are you doing?'"

*Here's CASE's full petition:*

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Jerry Iannelli is *Miami New Times'* daily-news reporter. He graduated with honors from Temple University in Philadelphia, where he developed a reputation for pestering college officials until they cursed at him. He then earned his master's degree in journalism from Columbia University. He moved to South Florida in 2015.

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\*\*The Turkey Point nuclear power plant in South Miami-Dade, circa 1974.

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