Documents provided by Laura Sue Wilansky to the U.S. Nuclear Regulatory Commission during the Turkey Point Nuclear Generating Units 3 and 4 Public Environmental Scoping Meeting on May 31, 2018:

Testimony by Laura Sue Wilansky
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To the Nuclear Regulatory Commission Scoping Hearings on Turkey Point Units 3 and 4 Relicensing
May 31, 2018

This is at least the fifth time I have come to speak before the NRC. I live ~~three~~ TWO counties and several hours drive from here - close enough to be deeply personally impacted by anything happening at the Turkey Point Power Plants, but far enough to make it an effort to come here to speak in person. I share this fact not for any praise or recognition, but to show how important this issue is to me. I am a private citizen, not being paid or compensated in any way for my time or attendance here.

I was born in 1952, so have been living with the threat of nuclear energy my whole life, for as long as I can remember. Although the dropping of atomic bombs on Hiroshima and Nagasaki was unspeakable, I believe the ongoing nuclear catastrophe at Fukushima poses the greatest threat to the future of life on Earth that we have ever seen – so far. The environmental damage has already surpassed the damage done by the nuclear accident at Chernobyl, and the release of radiation continues unabated and without solutions. The people of Japan trusted the TEPCO power plant owners who discounted the dangers of building multiple nuclear plants in that beautiful spot by the ocean. Their trust has proven to be woefully misplaced. And the location of that nuclear disaster right next to the ocean, just like the Turkey Point plants, has increased the damage being done exponentially.

After Fukushima, it's clear that nuclear energy is way too dangerous, and it's impossible to either prevent or clean up nuclear accidents. The very future of life on Earth is threatened by use of this form of energy! One accident, equipment malfunction, operator error, or terrorist attack at a nuclear plant could literally mean the end of life on Earth. If Fukushima didn't convince you, and you still think a disaster like can't happen at Turkey Point, just think about that little O-Ring on the Challenger. Here in Florida, these things are very present with us.

There is no way to guarantee 100% safety when using this technology, and when it comes to materials that remain deadly dangerous for tens of thousands of years, longer than all of human history, anything less than 100% safety cannot be considered safe. We humans are not infallible, and neither is anything we produce. Nor can we control - or predict - the forces of nature, as much as we might pretend we can. This means that nuclear plants simply cannot be guaranteed to be safe. And when it comes to nuclear materials, anything less than 100% safety is just not good enough.

Now FPL wants to extend the operating licenses for Turkey Point Units 3 and 4. These plants, as well as ALL that nuclear waste, WILL be partially or completely underwater in the foreseeable future. To me, that one fact is sufficient reason not to renew these licenses. I'm sure others speaking today and submitting comments will address other extremely serious issues with these plants, including the failing cooling canal system, the ongoing radioactive pollution of Biscayne Bay and saltwater intrusion into the Biscayne Aquifer (huge problems already impinging on South Florida's limited freshwater resources), and the threat to Biscayne National Park, and four other parks, wildlife and nature preserves, habitats and refuges in the immediate area.

I'm going to focus on the issue of Sea Level Rise. It is completely obvious and undeniable to those of us who live here in South Florida that sea level rise is happening, is increasing, and is already affecting our area. Civic planners, engineers and government officials throughout South Florida are deeply involved in planning to attempt to remediate this.

I want to share some info with you from the Unified Sea Level Rise Projection for Southeast Florida, prepared by the Sea Level Rise Work Group for the Steering Committee of the Southeast Florida Regional Climate Change Compact – a 35 page document published in October 2015.

I have included the website address in my printed comments which I will submit to you here: http://www.southeastfloridaclimatecompact.org/wp-content/uploads/2015/10/2015-Compact-Unified-Sea-Level-Rise-Projection.pdf

I will quote some of the most relevant conclusions. Please refer to the document for all details and documentation on how these conclusions were reached.

"This Unified Sea Level Rise projection for Southeast Florida updated in 2015 projects the anticipated range of sea level rise for the region from 1992 to 2100 (Figure 1). The projection highlights three planning horizons:
1) short term, by 2030, sea level is projected to rise 6 to 10 inches above 1992 mean sea level,
2) medium term, by 2060, sea level is projected to rise 14 to 34 inches above 1992 mean sea level,
3) long term, by 2100, sea level is projected to rise 31 to 81 inches above 1992 mean sea level.

"Forward thinking risk management is critical to avoiding loss of service, loss of asset value and most importantly loss of life or irrecoverable resources. An understanding of the risks that critical infrastructure will be exposed to throughout its life cycle such as sea level rise inundation, storm surge and nuisance flooding must be established early on in the conceptual phase. If incremental adaptation is not possible for the infrastructure proposed and inundation is likely, designing to accommodate the projected sea level rise at conception, or selection of an alternate site should be considered. Projects in need of a greater factor of safety related to potential inundation should consider designing for the upper limit of the blue-shaded zone. Examples of such projects may include evacuation routes planned for reconstruction, communications and energy infrastructure and critical government and financial facilities.

"Due to the community's fundamental reliance on major infrastructure, existing and proposed critical infrastructure should be evaluated using the upper curve of the projection, the orange curve (Figure 1, NOAA High). Critical projects include those or projects which are not easily replaceable or removable, have a long design life (more than 50 years), or are interdependent with other infrastructure or services. If failure of the critical infrastructure would have catastrophic impacts, it is considered to be high risk. Due to the community's critical reliance on major infrastructure, existing and proposed high risk infrastructure should be evaluated using the upper curve of the projection, the orange curve (Figure 1, NOAA High). Examples of high risk critical infrastructure include nuclear power plants....

"Sea level will continue to rise even if global mitigation efforts to reduce greenhouse gas emissions are successful at stabilizing or reducing atmospheric CO2 concentrations.... A substantial increase in sea level rise within this century is likely and may occur in rapid pulses rather than gradually.

"FACTORS INFLUENCING SEA LEVEL RISE (include):
ACCELERATION OF ICE MELT ICE SHEET DISINTEGRATION
WARM CURRENTS THAWING PERMAFROST"

I reiterate, this study recommends that facilities like nuclear power plants use the higher projection, which for 2060 is a 34 INCH RISE IN SEA LEVEL, and for 2100 is an 81 INCH RISE IN SEA LEVEL. In the almost three years since this study was published, we have seen every single one of these factors - acceleration of ice melt, ice sheet disintegration, warm currents and thawing permafrost - accelerating and exceeding predictions. So even these stunning projections may be too low. And if sea level rises another 81 inches, how high is storm surge going to be during hurricanes?

I invite you all to think about what is going to happen to these nuclear plants and the nuclear waste on the grounds around them. Picture these plants, their emergency cooling pumps and cooling canals with water lapping around them or covering them.... This is not a fantasy, but a realistic scenario! Think about the Uranium 235 fuel, Plutonium and other deadly toxic substances used in and generated by nuclear plants. There is no way to guarantee that some, or many of these substances will not find their way into our local environment. Some of these substances have a halflife of 80 million to over 700 million years! Can FPL guarantee they will be contained for all of that time, especially in light of sea level rise? None of us know how to do that. And allowing these plants to continue operating until 2053, and producing ever more deadly nuclear waste, is, to put it mildly, making the same mistake over and over again. As you may know, making the same mistake over and over again is one definition of insanity. Especially this mistake!

The massive BP oil eruption in the Gulf near Florida also comes to mind. If you think killing an oil well is difficult underwater, try decommissioning a nuclear plant! Do you really want to wait to order this plant decommissioned until after it's underwater? Now is not the time to be relicensing this plant for another 20 years! Now is the time to think about what can and should be done to keep all this deadly dangerous toxic material out of the environment – because relicensed or not, this plant and its nuclear waste ARE going to be sitting right there by the ocean when this sea level rise occurs.

With so many truly clean, safe, renewable and sustainable technologies now available and in development, there is no reason to continue to operate old and already failing nuclear plants, which were not designed to operate this long, and will only drain much-needed resources from full development of better, safer technologies. We will get much better value and results from investing in these technologies.

This is THE SUNSHINE STATE! We should be leading the nation, heck, the world in solar development! Instead we rank eighth in total installed solar in the United States, and second in solar installed so far in 2018. While the pace of solar development in Florida is increasing, we could be doing much more. FPL could be doing so much more! While 95% or more of their advertising and PR is devoted to promoting how much solar development they're doing, they are actually generating only less than 1/2 of 1% (that's 0.5%) of their electricity through solar power. (FPL Brochure attached)

It's time to end the use of all nuclear power, and put ALL - ALL! of our resources into truly safe, clean and sustainable technologies like conservation, solar, wind, geothermal and others, which absolutely can, and will supply all the energy the state, and the world needs, without destroying the world in the process.

Therefore I urge you to say NO to relicensing the nuclear plants at Turkey Point!

Thank you very much for listening to my comments.

y informed with our Medically ssential Service

If you or someone you know is dependent on electric-powered medical equipment, let us know. Our Medically Essential Services will help keep those with special needs informed by providing extra services, like special notifications before a hurricane. It's important to note, the program does not guarantee service nor provide an exemption from paying electric bills.

Get Help: » **FPL.com/MESP**

Through an innovative partnership with Brightline, we're helping power up Florida's first high-speed train service and local train stations. See how we're creating a cleaner energy future for all.

Learn more: » **FPL.com/Brightline**

brightline CHANGING THE CURRENT FPL

Tools to help you save

We offer several programs that can help you save energy and money. Here are just a few of those services, which are available to you by visiting **FPL.com/inhome** or calling **800-DIAL-FPL** (800-342-5375):

- Walk-through audit: In this free evaluation, our energy expert will visit your home to identify energy-saving opportunities and rebates available, improving your home's energy efficiency.
- Computer-assisted audit: In a more detailed evaluation costing $15, we'll also estimate potential savings, installation costs and the payback period of each recommendation.

A Building Energy Rating System survey is also available. It rates your home according to the current Florida energy-efficiency code requirements for new home construction and may help you qualify for improved mortgage options or increase your home's resale value. New or existing homes can apply for a Class 1 or 2 rating survey, which involves an on-site inspection. The cost for homes up to 2,000 square feet* is $480, or $555 with an air-conditioning duct leakage test, which includes one handler. Add $35 for each additional handler. At a cost of $75, the Class 3 rating option is for new construction only and is based on site plans and construction documents.

**For Class 1 and 2 surveys, there is an additional charge of 8 cents per square foot for homes greater than 2,000 square feet, or 3 cents per square foot for a Class 3 survey.*

Evacuation help for special needs customers

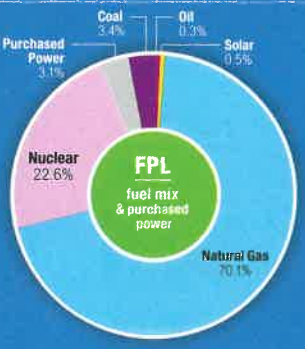
With storm season approaching, it's important to be prepared. If you or anyone you know has special needs and requires assistance in case of evacuation, your local government can help. Contact your county emergency management office to learn about shelters in your community.

Be Prepared:
» **FPL.com/evacuation-assistance**

Where does your energy come from?

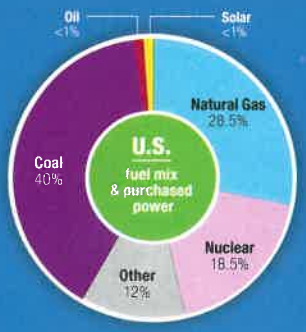
FPL's power comes from a variety of sources, including clean-burning natural gas and emissions-free nuclear and solar. We've significantly reduced our use of coal while substantially increasing our investment in cost-effective solar.

See our latest fuel mix:



Sources of electricity generation for the 12 months that ended December 2017

See how we compare to the rest of the nation:



Major energy sources and percent share of total U.S. electricity generation in 2016

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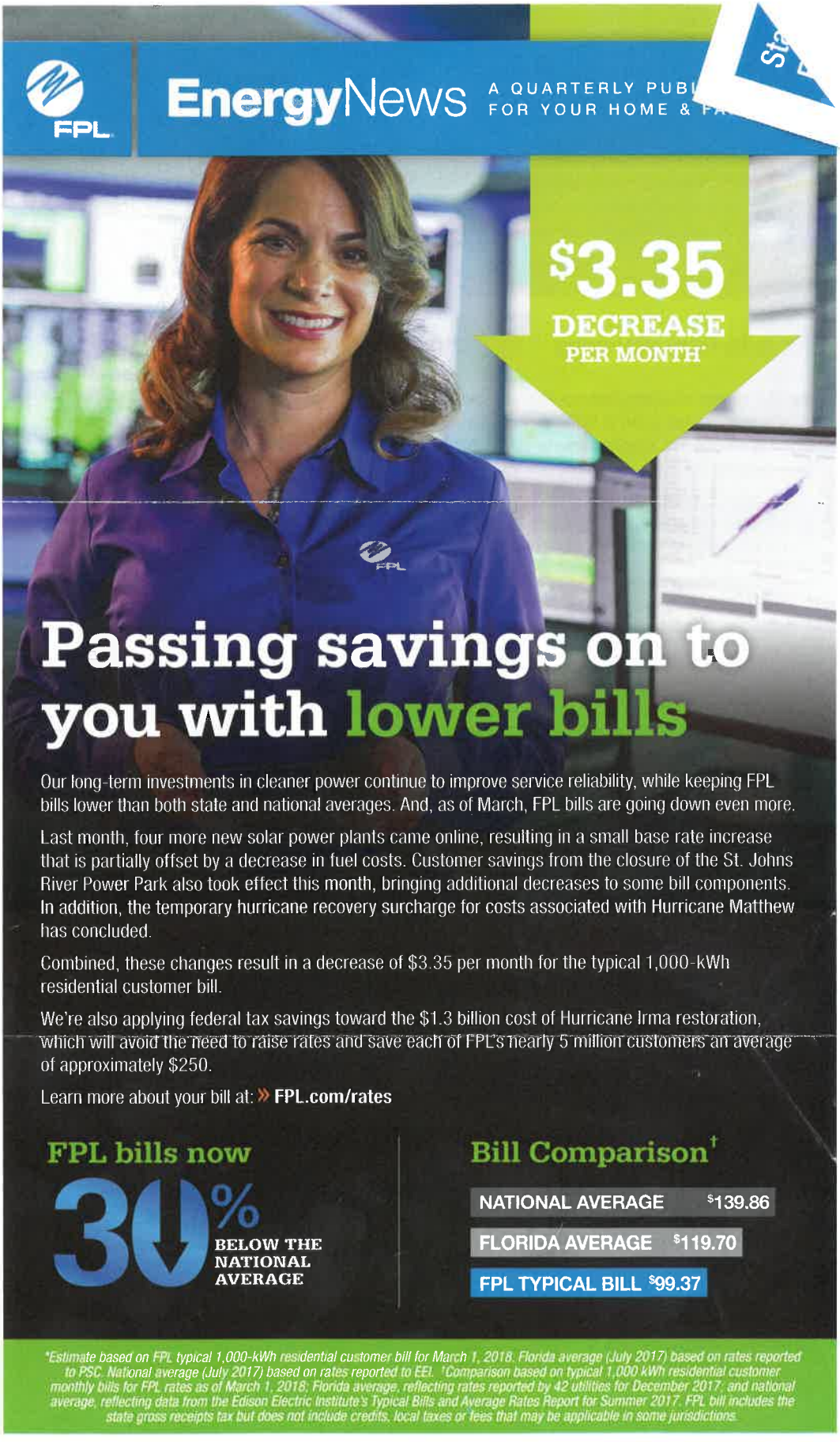
CHANGING THE CURRENT. FPL


FPL
EnergyNews
A QUARTERLY PUBL
FOR YOUR HOME &
$3.35
DECREASE
PER MONTH*
Passing savings on to you with lower bills
Our long-term investments in cleaner power continue to improve service reliability, while keeping FPL bills lower than both state and national averages. And, as of March, FPL bills are going down even more.
Last month, four more new solar power plants came online, resulting in a small base rate increase that is partially offset by a decrease in fuel costs. Customer savings from the closure of the St. Johns River Power Park also took effect this month, bringing additional decreases to some bill components. In addition, the temporary hurricane recovery surcharge for costs associated with Hurricane Matthew has concluded.
Combined, these changes result in a decrease of $3.35 per month for the typical 1,000-kWh residential customer bill.
We're also applying federal tax savings toward the $1.3 billion cost of Hurricane Irma restoration, which will avoid the need to raise rates and save each of FPL's nearly 5 million customers an average of approximately $250.
Learn more about your bill at: » FPL.com/rates
FPL bills now
30%
BELOW THE NATIONAL AVERAGE
Bill Comparison†
NATIONAL AVERAGE $139.86
FLORIDA AVERAGE $119.70
FPL TYPICAL BILL $99.37
*Estimate based on FPL typical 1,000-kWh residential customer bill for March 1, 2018. Florida average (July 2017) based on rates reported to PSC. National average (July 2017) based on rates reported to EEI. †Comparison based on typical 1,000 kWh residential customer monthly bills for FPL rates as of March 1, 2018; Florida average, reflecting rates reported by 42 utilities for December 2017; and national average, reflecting data from the Edison Electric Institute's Typical Bills and Average Rates Report for Summer 2017. FPL bill includes the state gross receipts tax but does not include credits, local taxes or fees that may be applicable in some jurisdictions.