Clean energy solutions to FPL's proposed Turkey Point 6 & 7 nuclear reactors

FPL's proposed nuclear reactors can more cost-effectively be met with demand side management programs. In meeting demand, energy efficiency measures meet demand at less than 3 cents per kilowatt hour (kWh)¹, while the proposed Turkey Point nuclear reactors will meet demand at a cost of more than 15 cents per kWh.²

FPL requested in 2014 that its conservation goals be gutted by the Florida Public Service Commission (PSC). In doing so, the Company requested that the PSC reduce its energy savings goals by 99%. Energy efficiency programs provide energy savings that help customers reduce energy use and save money on bills. The Commission, while increasing them a bit, essentially granted FPL's request in a December 2014 order.³

Previous to their request, FPL was already under-performing other peer utilities, capturing a mere 2/10 of 1% (0.2%) of annual energy sales through energy efficiency programs.⁴ However, even at this low level of investment, if FPL had continued its demand side management programs it had in place in 2013, it would capture over 70% (1520 MW) of capacity it now claims it needs in the 2027/28 timeframe from new reactors.⁵ Each year the need for more capacity is deferred allows FPL to choose to build lower cost, more modular resources, such as solar power, if efficiency could not meet the entire load in over a decade.

FPL underperforms on solar power, generating less than 1/10 of 1% (0.01%) of its electricity through solar power.⁶ Given that solar power helps meet peak demand, and power plants are built to meet peak demand, meaningful investment in solar could help defer the need for the proposed Turkey Point nuclear reactors.

FPL's current efficiency plan now achieves almost zero energy savings – capturing just 3/100 of 1% of annual energy sales (0.03%). Instead of saving over 120 MW of capacity each year – as it did in the 2010-2013 timeframe – the plan now only saves 40-50 MW. If FPL were a state, it would rank an abysmal 49^{th} in energy savings.⁷

What's really driving this process? FPL shareholders earn a 10.5% return on investments in the proposed nuclear reactors. The advanced-cost recovery law, Florida's "nuclear tax," passed in 2006 shifts the all the financial risk of constructing the reactors from power company shareholders to utility customers. Even if FPL abandons plans to build the reactors, customers do not get their money back, AND FPL can recover any money it has invested in the proposed reactors from customers.

¹ ACEEE, *The Best Value for America's Energy Dollar: A National Review of the Cost of Utility Energy Efficiency Programs*, March 26, 2014, at http://aceee.org/research-report/u1402.

² FPL Witness Sim, Docket No. 130009, Hearing Transcript Volume 4 at p. 763.

³ Florida Public Service Commission, *Final Order PSC-14-0696-FOF-EU approving numeric conservation goals*, December 14, 2014.

⁴ FPL Witness Sim, Docket No. 130009, Hearing Transcript Volume 4 at p. 759.

⁵ Based on analysis of MW reductions from past demand side management programs.

⁶ FPL, Fuel Mix and Purchased Power, at https://www.fpl.com/clean-energy/plant-projects.html.

⁷ Based on national ACEEE data, and Florida Public Service Commission docket filings.