

Comments on Draft Environmental Impact Statement for Combined Operating Licenses (COLs) for FPL's Turkey Point Nuclear Plant Units 6 & 7 April 22, 2015 - Miami, Florida

Good evening. George Cavros, Florida Energy Policy Attorney for the Southern Alliance for Clean Energy (SACE). We are a regional non-profit, non-partisan, clean energy organization with staff, board of directors and members in Florida that advocates for low cost, low risk clean energy solutions to climate change.

FPL's proposed Turkey Point reactors are neither low cost nor low risk. While there are a host of environmental and safety impacts from the extremely water-intensive proposed reactors, I'm going to limit my comments to the need for power.

There is no need for the proposed reactors – *the fact that* they have been delayed several times and the in-service date pushed back at least ten years is but one indication. *The fact that* FPL will not commit to actually completing the project should be another clue.

Moreover, the NRC's reliance on Florida Public Service Commission (PSC) orders *and* the state's utility resource planning process is badly misplaced. As such, we believe the "No Action" alternative should be the agency's preferred choice.

It's been well established that energy efficiency is the lowest cost resource in meeting electricity demand. It can meet demand at an investment of less than 3 cents per kWh¹, a fraction of the levelized cost of the proposed reactors, which is over 15 cents per kWh.²

Yet, FPL's past efforts in helping customers reduce energy use and save money on their bills has been abysmal – capturing a mere 2/10 of 1% (0.2%) of annual energy sales through energy efficiency programs.³ However, even at these low-level goals, if FPL continued the conservation programs it had in place in 2013, it would capture over 1520 MW of capacity – 70% of what it now claims it needs in the 2027/28 timeframe from the proposed reactors.⁴ Each year the need for more capacity is deferred, it 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.

Unfortunately, FPL's forthcoming efforts over the next ten years to help customers reduce energy use and save money on their bills, is simply a national embarrassment. The PSC recently approved the Company's request to gut its conservation goals. Now FPL will meet only 3/100 of 1% (0.03%) of annual demand through energy savings. To put it in perspective, if FPL were a state, it would rank almost at the bottom – behind Alabama and Mississippi in energy savings for customers. See the attached illustrative chart.

Hardest hit by the almost non-existent energy savings goals will be those on fixed incomes, and the working poor that may not have the information or the resources to make their homes more energy efficient.

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

⁴ Based on analysis of MW reductions from past demand side management programs.

The proposed nuclear reactors are already raising monthly customer electricity rates by virtue of a state law passed in 2006 that shifts all the financial risk of the construction of the proposed reactors from its shareholders to its customers who are paying in advance for this project.

It should also be noted that the net cumulative fuel savings of the project, extolled by FPL as the prime benefit for customers, will not be realized by customers until 25 to 36 years from today – assuming the project is built at all. This practically means that a 70 year old FPL customer today may not break even on the project, if at all, until the customer is 106 years old.⁵

Additionally, FPL generates less than 1/10 of 1% (0.01%) of its electricity from 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 reactors. Yet, FPL assigns solar power a zero value in avoiding capacity additions in its resource planning process.

Why is this important in the context of the DEIS? Because the alleged need for the power plant is the product of a disjointed state utility planning process - upon which the NRC relies.

To reach its determination that the need is there, the NRC concludes that Florida's utility planning process is 1) systematic, 2) comprehensive, 3) subject to confirmation; 4) and responsive to forecasting uncertainty. That description simply does not fit the planning process in Florida. There are three disjointed components to the state planning process: a Ten Year Site Plan filing; a need determination; and conservation goals setting.

A Ten Year Site Plan is a summary planning document. The PSC cannot require the utility to change it. The power company can change it any time of its own accord. There is no open stakeholder process that provides meaningful participation in the utility's long-term planning process.

Moreover, energy efficiency and renewables such as solar power are never placed on a level playing field in the Florida planning process – nor considered comprehensively. We will provide more detailed, written comments on the state's disjointed planning process - suffice to say that the NRC should not rely on it and it must take a "hard look" at energy efficiency and renewables to meet the projected need.

Lastly, it's no surprise that FPL argues that there's a need for a \$20 billion reactor project to meet demand 12 years from now. They have gutted their energy efficiency programs for customers - and don't assign any capacity avoidance value to solar power. Moreover, FPL shareholders will earn a 10.5% return on the money invested in the nuclear plant – while FPL customers shoulder all the financial risk.

It's a sweet deal for FPL shareholders, not its customers.

Thank you.

⁵ Southern Alliance for Clean Energy, Post-Hearing Statement, Docket 130009, August 19, 2013, at http://www.cleanenergy.org/wp-content/uploads/F_SACE_FLNCRC-2013-Post-Hearing_StmtandBrief_081913.pdf.

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

FPL's Projected Energy Savings Ranking for 2015*

ACEEE State Ranking

| Rank | State | Savings as Percentage of Prior Year Sales |
|------|----------------------|---|
| 1 | Rhode Island | 2.09% |
| 2 | Massachusetts | 2.05% |
| 3 | Vermont | 1.78% |
| 4 | Arizona | 1.74% |
| 5 | Hawaii | 1.67% |
| 6 | Michigan | 1.51% |
| 7 | Oregon | 1.43% |
| 8 | Washington | 1.35% |
| 9 | California | 1.25% |
| 10 | New York | 1.13% |
| 11 | lowa | 1.06% |
| 12 | Minnesota | 1.04% |
| 13 | Illinois | 0.99% |
| 14 | Maryland | 0.97% |
| 15 | Pennsylvania | 0.97% |
| 16 | Connecticut | 0.97% |
| 17 | Wisconsin | 0.90% |
| 18 | Ohio | 0.89% |
| 19 | Colorado | 0.88% |
| 20 | Utah | 0.87% |
| 21 | Nevada | 0.81% |
| 22 | Idaho | 0.78% |
| 23 | Maine | 0.78% |
| 24 | Montana | 0.65% |
| 25 | Indiana | 0.59% |
| 26 | New Jersey | 0.56% |
| 27 | New Hampshire | 0.56% |
| 28 | North Carolina | 0.55% |
| 29 | New Mexico | 0.54% |
| 30 | Kentucky | 0.52% |
| 31 | Missouri | 0.49% |
| 32 | Arkansas | 0.49% |
| 33 | District of Columbia | 0.47% |
| 34 | South Carolina | 0.38% |
| 35 | Tennessee | 0.28% |
| 36 | Oklahoma | 0.27% |
| 37 | Florida | 0.27% |
| 38 | West Virginia | 0.22% |

| 39 | Georgia | 0.22% |
|----|----------------|-------|
| 40 | Nebraska | 0.20% |
| 41 | Texas | 0.19% |
| 42 | South Dakota | 0.18% |
| 43 | Wyoming | 0.14% |
| 44 | Delaware | 0.08% |
| 45 | Mississippi | 0.08% |
| 46 | North Dakota | 0.07% |
| 47 | Alabama | 0.06% |
| 48 | Virginia | 0.03% |
| 49 | FPL | 0.03% |
| 50 | Alaska | 0.02% |
| 51 | Louisiana | 0.02% |
| 52 | Kansas | 0.02% |
| 53 | Guam | 0.00% |
| 54 | Puerto Rico | 0.00% |
| 55 | Virgin Islands | 0.00% |
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^{*}Sources: American Council for an Energy Efficiency Economy, *The 2014 State Energy Efficiency Scorecard*, Table 14; Florida Power and Light, *2015-2024 Demand Side Management Plan*, Table 1, Docket No. 150085-EG; Florida Power and Light, *Ten Year Site Plan*, Schedule 2.3, Net Energy for Load GWh.