

23 June 2015

Lee Eng Tan, Senior Attorney
Office of the General Counsel
Public Service Commission
State of Florida

re: Solar Energy in Florida - Request for Comments

To Whom It May Concern:

Thank you for the opportunity to write in support of efforts to expand the use of solar energy technologies in Florida. In brief, I believe we must increase our use of solar energy (photovoltaic, concentrated solar, and solar hot water heating) vigorously and rapidly, and I implore the Public Service Commission to support these efforts.

I have experienced firsthand the benefits from harnessing Florida's exceptional solar resources. My wife and I built an energy-efficient home three years ago, and included a 5kW photovoltaic array and a solar hot water heater as part of our project. We generate about two-thirds of the electricity we use. Our photovoltaic array yields a net annual return on investment of 8%. We send our excess power back to the grid to help offset our neighbors' use during peak use hours. We emit no greenhouse gasses. [<http://somigreenhouse.blogspot.com>]

My wife and I speak often about sustainable construction, and are actively involved in community efforts to expand the adoption of renewable energy generation and energy efficiency measures in Florida. In our experience, the chief obstacles to widespread adoption of solar technologies are resistance by utilities (in our case, FPL) and public ignorance. Concrete steps the Public Utility Commission could take include:

- a. Supporting legislative efforts to enable individuals and businesses to sell excess electricity to utilities (via net metering, with no limits) and to other individuals and businesses (as called for in the current constitutional amendment proposal). The best way to expand the state's installed p/v capacity is by offering incentives for building owners to install privately owned arrays that are tied to the grid. Our region has vast swaths of flat roofs on warehouses, shopping centers, garages and other buildings that are ideal for photovoltaic installations, but these building owners often cannot reap the benefits of installing p/v panels because their tenants are the utility customers (and they alone can apply for net metering). Changing the law to allow owners of "big box" buildings to generate and sell power – either to the utility or to other consumers – would add many megawatts of installed capacity without any additional capital costs to the utilities or the state.

- b. Working with other state agencies to turn fallow land and rooftops into solar farms. For example, the Massachusetts Department of Transportation has installed photovoltaic panels on unused fields they control, which has lowered their utility costs (saving millions of taxpayers' dollars), eased the burden on utilities (who will see savings in both generation and transmission costs), and provided an entrepreneurial opportunity for solar installers. Since photovoltaic arrays produce a net positive return on investment, every unit of state government should install p/v arrays to power their facilities and save taxpayer funds. [<http://boston.cbslocal.com/2015/04/05/mass-dot-solar-farms-would-save-state-millions-in-energy-costs/>]

- c. Supporting institutional efforts to install photovoltaic arrays. In my service on FIU's environment committee, I have advocated installing photovoltaic arrays on all of our campuses, but I have found several road blocks put in place by our utility (FPL). They require FIU to take out an unnecessary insurance policy before allowing the university to install its own solar panels; this policy seems designed simply to tamper interest in photovoltaics at FIU by making the technology prohibitively expensive. FPL's recent announcement of a partnership with the university, in which the utility will install p/v panels at the Engineering Campus, demonstrates the utility's real concern: they are only interested in solar power installations that they own, so that they can continue to charge recovery costs to rate payers. The Public Service Commission should reverse this process – let universities like FIU install multi-megawatt photovoltaic installations without interference from the utility. The university has a strong interest in expanding its portfolio of renewable energy, and would do so if not for the utility's efforts to thwart our initiatives. State universities, community colleges, public school districts, library systems, hospitals and other institutional facilities could expand the installed capacity of photovoltaic panels dramatically, and would do so in a manner that reduces long term operating costs and produces a net savings to taxpayers.

- d. Working proactively with other public agencies to encourage and incentivize private developers to build Zero Net Energy communities in Florida. Real estate developers tend to be cautious, and slow to adopt new technologies. The state should provide educational resources and financial incentives to building developers to build net zero facilities throughout the state. [<http://ecowatch.com/2015/04/27/zero-net-energy-sierra-crest/>]

Besides saving the public considerable amounts of money and making important strides toward eliminating greenhouse gas emissions, distributed solar has the great benefit of making our power grid more resilient by reducing our dependence on aging – and increasingly vulnerable – power plants. The state is filled with building owners (like my wife and me) who will happily expand our region's installed capacity of solar generated power. We need the Public Service Commission to eliminate the interference from the utilities that hampers our efforts, and to provide reasonable incentives – in the form of unlimited net metering and consumer-to-consumer sales – to help us meet our ultimate goal of generating 100% of our state's power from renewable energy sources. The Sunshine State should lead the world in solar energy production. Please do everything you can to make this happen!

Best wishes,

A handwritten signature in black ink, appearing to read 'David Rifkind', written in a cursive style.

David Rifkind, Ph.D.
Associate Professor
South Miami resident