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To: [Lee Eng Tan](#)
Subject: Solar Energy in Florida - Request for Comments
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Florida Public Service Commission
RE: Solar Energy in Florida – Request for Comments

Thank you for the opportunity to comment on what policies would be effective in promoting demand side / supply side solar energy systems. Fortunately a number of countries and states here in America have already put in place policies that are increasing the amount of solar generated electricity. The Commission can examine these programs and perhaps find some suitable for Florida. I would suggest visiting the Data Base for Renewables and Energy Efficiency at <http://www.dsireusa.org/>.

This request is appropriately timed because increasing the use of solar energy will also help Florida comply with the new EPA rules currently under construction to reduce the emissions of carbon dioxide from power plants. Increasing the amount of solar generated electricity will not only reduce greenhouse gases. It will also reduce the quantities of water that are diverted away from public use to cool thermal power plants. Photovoltaic systems do not require water for cooling. Water conservation has become more critical in these times of extreme weather events.

The PSC has in a way been stymied from implementing more solar energy systems. The Commission is charged with insuring fair and reasonable rates for ratepayers. This proscription has forced the utilities to use low-cost fuels. So for years and years the public has become used to hearing coal trains in the night or waiting at traffic crossings as coal cars obstruct the flow of traffic; frustrated drivers often adding more CO₂ to the atmosphere by not shutting off their engines. The extraction of fossil fuels is fraught with stories of exploitation, habitat / mountaintop destruction, water body pollution from coal ash, diseases caused by airborne particulate / gaseous material; the list is long. The transition to solar will have more benefits than curbing CO₂.

The cost of photovoltaic conversion modules has come down dramatically from the initial prohibitive highs of thirty years ago. Especially in the last five years we have seen significant cost reductions. Demand for PV was driven first by environmentally aware consumers. Now more than half the states are contributing to demand by requiring that utilities supply some percentage of electricity from solar. States and the federal government have driven demand by providing a variety of financial incentives. All these factors have contributed to the mass production of solar modules we are seeing now both in this country and in countries around the world. Florida is in a great position to benefit in many ways from these lower PV prices fostered by the boom in manufacturing.

Florida investor owned utilities have recently announced plans to build a few so-called solar farms. PSC approval indicates that these modest solar plants meet the criteria for fair and reasonable rates. This is good news! The PSC can now foster more supply side solar simply by requiring utilities to build more of these solar facilities. Output from these plants will be modest compared to the huge solar farms in California but this has an advantage. Big solar farms require acres of space, sometimes intruding on valuable wildlife habitat. By building

more but smaller solar arrays distributed across all Florida, we can control environmental fragmentation. Vacant areas already disturbed by human activity can be put to good use. For instance, solar arrays can be built in power line easements.

Arizona authorities recently approved pilot programs for increasing solar collection by utility companies which improve on the solar farm scenario. Residential and commercial rooftops often have excellent sun exposure and these rooftops are already “taking up space.” The Arizona Corporation Commission (ACC) approved Tucson Electric Power (TEP) and Arizona Public Service (APS) plans to implement rooftop solar programs in their service territories. The ACC prohibits the utilities from using funds collected from other ratepayers to support these programs. This limitation is an attempt to insure that the regulated utilities do not use financing structures that undercut sales of solar systems by private companies. Fair competition in the solar industry will continue to decrease module and installation costs. These pilot programs in Arizona may provide information valuable for your consideration.

Net energy metering has probably been the most productive policy incentivizing private demand for solar systems. Solar customers connected to the grid are allowed to recoup electricity during the night which their own systems have contributed to the grid during daylight hours. In some cases solar users actually provide more energy to the grid than they consume. This has advantages for the utility. The question has become what should solar customers pay for the use of the grid?

I have met a number of solar owners and all of them agree that the grid is essential for their systems. They believe also that they are contributors to the grid. A fair value has to be determined for this exchange. Utilities must be more accountable in breaking apart the services they provide. Fixed pricing for grid services may not be appropriate considering the technological advances available now to separate time-of-use, capacity, ancillary services, energy and other pricing components. Solar customers have no desire to see non-solar customers pay more to maintain the grid. At the same time they believe they do provide a service to the utility. They simply want a fair analysis of their own interaction with the provider.

Property Assessed Clean Energy (PACE) is legislation that provides for energy efficiency upgrades and solar system costs to be extended and paid with property taxes. These programs have obvious advantages across income groups and could significantly advance solar applications. Unfortunately, several PACE cases are currently being deliberated by the Florida Supreme Court. If the cases are resolved favorably for the intent of the legislation utilities should be required to advise their customers about PACE programs available in their service areas.

Numerous polls conducted since 2008 show that Floridians in both major political parties want more access to solar energy. The PSC is to be applauded for opening this dialogue with the public. I hope my own comments will be helpful. Thank you.

Samuel Kendall