



June 23, 2015

Lee Eng Tan
Senior Attorney, Office of the General Counsel
Florida Public Service Commission
2540 Shumard Oak Blvd
Tallahassee, FL 32399-0850

Dear Ms. Tan,

Alachua County and Broward County are pleased to provide a joint response to the Florida Public Service Commission's April 23, 2015, request for comments on solar energy in Florida.

Broward County and Alachua County are partners—along with Miami-Dade and Orange counties, the City of Venice, Florida Atlantic University, and the Florida Solar Energy Center—in the Go SOLAR Florida initiative, which received a \$2.3 million federal grant to reduce the soft costs of rooftop solar photovoltaic (PV) systems and spark wider adoption of solar energy in Florida by streamlining solar permitting and installation processes and expanding financing opportunities.

We appreciate the opportunity to present these joint comments to the Commission on behalf of our counties. Please do not hesitate to contact us if you have any questions about this submittal.

Yours sincerely,

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1. What policies or programs would be most effective at promoting demand-side solar energy systems (i.e., programs effective on the customer side of the meter)?

Adopt meaningful goals for demand-side renewable energy systems, as required by the Florida Energy Efficiency and Conservation Act (FEECA).

The Florida Energy Efficiency and Conservation Act (FEECA) uses the term “shall,” rather than “may,” in its direction to the Florida Public Service Commission (PSC) to adopt goals to increase development of demand-side renewable energy systems. Therefore, the PSC’s decision last year to eliminate the investor-owned utility solar rebate program was regrettable, leaving Florida utility customers with no policies or programs encouraging the installation of solar or other renewable systems (other than net metering and the exemption of renewable energy source equipment from residential property assessments, which are required under different authorities than FEECA). That decision should be reversed, and the PSC should adopt meaningful goals for utilities for demand-side renewable energy through the use of a well-designed, modest solar incentive to customers.

a) Can the policies or programs be implemented under current Florida statutes?

Yes.

b) Can the policies or programs be implemented under current FPSC rules? If not, what changes or additions to the rules would be needed?

Yes.

c) What are the impacts of the policies or programs on system reliability?

Demand-side solar can improve system reliability by bringing generation resources closer to the load that is served, thereby reducing transmission and distribution grid line losses. More customer self-generation of electricity, in conjunction with investments in smart grid technologies (many of which are needed regardless of the sources of electricity powering the grid) and greater availability of energy storage technologies, will further promote overall system reliability and resilience.

d) What are the impacts of the policies or programs on system fuel diversity?

The state uses natural gas to generate more than 60 percent of its electricity, and that reliance is expected to grow in coming years. This fuel source has had a history of price volatility, thereby exposing customers to price shocks and committing the state to continuing dependence on fuel imports. Increasing the share of Florida electricity generated by solar, which uses no fuel, would reduce the state’s dependence on imported nuclear and carbon-based fuels and would lead to a cleaner energy future for Floridians.

e) Identify the cost-effectiveness of the policies or programs compared to traditional forms of generation.

The cost of demand-side solar systems are borne by the customer, therefore cost effectiveness depends on the customer's financial expectations. Florida has the best solar resource east of the Mississippi River, so it is economics and policy that will determine demand-side solar expansion. Demand-side solar is reaching retail grid parity in Florida. Experience in other states suggests that a supportive policy environment can unleash significant demand-side solar development. The cost of a solar incentive program must be measured against the benefits it provides, which should include fuel savings, transmission and distribution benefits, fuel hedge benefits, and economic and environmental benefits.

f) Identify specific costs associated with the policies and programs and who will bear them.

The assignment of costs depends on the design of the specific policies and programs used to promote the achievement of demand-side renewable energy goals. The PSC should not shy away from requiring utility solar incentives which might cause a modest increase in rates for the general body of ratepayers given the significant benefits to all ratepayers from additional solar energy being placed on the grid. (See item (g) below).

g) Identify how the policies or programs will be fair, just, and reasonable across the general body of ratepayers.

Costs must be considered in context, not in a vacuum. While there may be costs to the expiring incentives for utility customers to install solar energy systems, they are not that expensive compared to the overall costs charged to utility service customers, particularly in the context of advanced cost recovery for nuclear plants, which have not yet benefited ratepayers. In contrast, the general body of ratepayers benefits from solar incentives in a variety of ways: extra capacity from distributed generation reduces fuel costs and acts as a fuel price hedge, provides power during summer peak periods (when providing power is the costliest for the power company), can defer the need for new power plants, and reduces transmission and distribution grid line losses while diversifying the state's electricity resource mix.

Protect existing net metering policies.

As net metering is currently one of the few statewide incentives supporting solar energy, the PSC should reject any attempts to weaken it, reduce its value to the customer, or require additional fees for use of the electrical grid.

a) Can the policies or programs be implemented under current Florida statutes?

Yes.

b) Can the policies or programs be implemented under current FPSC rules? If not, what changes or additions to the rules would be needed?

Yes. Florida law provides statutory authority to the PSC to establish detailed net metering policies.

c) What are the impacts of the policies or programs on system reliability?

Demand-side solar can improve system reliability by bringing generation resources closer to the load that is served, thereby reducing transmission and distribution grid line losses. More customer self-generation of electricity, in conjunction with investments in smart grid technologies (many of which are needed regardless of the sources of electricity powering the grid) and greater availability of energy storage technologies, will further promote overall system reliability and resilience.

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f) Identify specific costs associated with the policies and programs and who will bear them.

The cost of demand-side solar systems are borne by the customer. Demand-side solar system generation may lead to reduced revenues for the incumbent utility. It is important to note that this reduced revenue is no different in nature than a customer making their home or business more energy efficient. Solar customers should not be subject to punitive or discriminatory rates because they meet a portion of power needs through self-generation.

g) Identify how the policies or programs will be fair, just, and reasonable across the general body of ratepayers.

Numerous studies have indicated that the benefits of net metering outweigh any costs. Ratepayers would benefit from the extra capacity from distributed generation reducing the need for expensive additional generation at peak periods, fuel savings, fuel hedge benefits, grid benefits, and the deferral of the need for new power plants.

Promote shared solar projects by allowing virtual net metering.

Condominium owners, renters, and homeowners whose properties are unsuitable for solar installations (e.g. due to shade or orientation) are unable to participate in on-site net metering, thereby reducing the number of Florida residents able to engage in solar energy projects overall. “Shared solar” projects, in which a utility customer could buy or lease solar PV panels located at another location and apply the offsets and credits to his/her bill would address this problem and promote greater use of solar energy.

The PSC should investigate the feasibility of allowing this “virtual net metering” under current law. For example, the PSC could issue a rule defining “customer’s premises” (which is not defined in statute) as including solar equipment owned by the customer at another location within the state.

a) Can the policies or programs be implemented under current Florida statutes?

There is no statutory requirement that a solar system must be located on the customer’s property to be eligible to execute a standard net metering and interconnection agreement. Therefore, it is likely within the Commission’s authority to allow off-premise net-metered solar systems.

b) Can the policies or programs be implemented under current FPSC rules? If not, what changes or additions to the rules would be needed?

See (a) above.

c) What are the impacts of the policies or programs on system reliability?

Demand-side solar can improve system reliability by bringing generation resources closer to the load that is served, thereby reducing transmission and distribution grid line losses. More customer self-generation of electricity, in conjunction with investments in smart grid technologies (many of which are needed regardless of the sources of electricity powering the grid) and greater availability of energy storage technologies, will further promote overall system reliability and resilience.

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g) Identify how the policies or programs will be fair, just, and reasonable across the general body of ratepayers.

Numerous studies have indicated that the benefits of net metering outweigh any costs. Ratepayers would benefit from the extra capacity from distributed generation reducing the need for expensive additional generation at peak periods, fuel savings, fuel hedge benefits, grid benefits, and the deferral of the need for new power plants.

Prohibit consideration of solar energy devices in commercial property assessments.

A constitutional amendment approved by voters in November 2008 and implemented through legislation in 2013 prohibits the consideration of renewable energy devices and wind resistance improvements in residential property assessments. However, commercial properties were not included. During its 2014 and 2015 session, the Florida Legislature considered resolutions to place an amendment regarding renewable energy equipment on commercial property before voters, but they failed to pass.

a) Can the policies or programs be implemented under current Florida statutes?

No. A constitutional amendment would be required.

b) Can the policies or programs be implemented under current FPSC rules? If not, what changes or additions to the rules would be needed?

No.

c) What are the impacts of the policies or programs on system reliability?

Demand-side solar can improve system reliability by bringing generation resources closer to the load that is served, thereby reducing transmission and distribution grid line losses. More

customer self-generation of electricity, in conjunction with investments in smart grid technologies (many of which are needed regardless of the sources of electricity powering the grid) and greater availability of energy storage technologies, will further promote overall system reliability and resilience.

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f) Identify specific costs associated with the policies and programs and who will bear them.

The elimination of this tax on renewable energy equipment might reduce government revenues slightly. The costs of the solar system are borne by the customer. In exchange, all ratepayers would benefit from fuel savings, fuel hedge benefits, grid benefits, and the deferral of the need for new power plants.

g) Identify how the policies or programs will be fair, just, and reasonable across the general body of ratepayers.

Assuming the systems are net metered, such costs are likely to be negligible and easily borne by the general body of ratepayers. In exchange, ratepayers would benefit from the extra capacity from distributed generation reducing the need for expensive additional generation at peak periods, fuel savings, fuel hedge benefits, grid benefits, and the deferral of the need for new power plants. Numerous studies have indicated that the benefits of net metering outweigh any costs.

Eliminate the tangible personal property tax on leased solar equipment.

The tangible personal property tax on leased solar PV equipment inhibits the wider development of solar leasing programs, which overcome one of the most significant barriers to small-scale solar: high up-front purchase and installation costs.

a) Can the policies or programs be implemented under current Florida statutes?

No. A constitutional amendment to exempt solar PV equipment (or renewable energy equipment more broadly) would be required.

b) Can the policies or programs be implemented under current FPSC rules? If not, what changes or additions to the rules would be needed?

No.

c) What are the impacts of the policies or programs on system reliability?

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f) Identify specific costs associated with the policies and programs and who will bear them.

The elimination of this tax on renewable energy equipment might reduce government revenues slightly. Otherwise, the costs would be borne by the companies owning the solar energy systems and their lessee customers. Assuming the systems are net metered, such costs are likely to be negligible and easily borne by the general body of ratepayers. In exchange, ratepayers would benefit from the extra capacity from distributed generation reducing the need for expensive additional generation at peak periods, fuel savings, fuel hedge benefits, grid benefits, and the deferral of the need for new power plants. Numerous studies have indicated that the benefits of net metering outweigh any costs.

g) Identify how the policies or programs will be fair, just, and reasonable across the general body of ratepayers.

See (f) above.

Legalize limited third-party sales of electricity (i.e. Power Purchase Agreements).

By prohibiting anyone other than an investor-owned or publicly-owned utility from selling electricity to customers, Florida law significantly restricts the development of demand-side solar energy through third-party ownership/leasing models, such as Power Purchase Agreements. The Sunshine State has high solar potential and would undoubtedly see significant expansion of demand-side solar energy if these third-party financing models were available to homeowners and businesses, as has been demonstrated in many other states.

The Florida Legislature could craft a limited exception to the ban on the third-party sale of electricity in order to allow the use of Power Purchase Agreements in Florida.

a) Can the policies or programs be implemented under current Florida statutes?

No. Legislation would be required.

b) Can the policies or programs be implemented under current FPSC rules? If not, what changes or additions to the rules would be needed?

No.

c) What are the impacts of the policies or programs on system reliability?

Demand-side solar can improve system reliability by bringing generation resources closer to the load that is served, thereby reducing transmission and distribution grid line losses. More customer self-generation of electricity, in conjunction with investments in smart grid technologies (many of which are needed regardless of the sources of electricity powering the grid) and greater availability of energy storage technologies, will further promote overall system reliability and resilience.

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f) Identify specific costs associated with the policies and programs and who will bear them.

The costs would be borne largely by the companies owning the solar energy systems and the customers purchasing the electricity from those third parties. Assuming the systems are net metered, such costs are likely to be negligible and easily borne by the general body of ratepayers. In exchange, ratepayers would benefit from the extra capacity from distributed generation reducing the need for expensive additional generation at peak periods, fuel savings, fuel hedge benefits, grid benefits, and the deferral of the need for new power plants. Numerous studies have indicated that the benefits of net metering outweigh any costs.

g) Identify how the policies or programs will be fair, just, and reasonable across the general body of ratepayers.

See (f) above.

2. What policies or programs would be most effective at promoting supply-side solar energy systems (i.e., utility or third-party owned)?

Establish a statewide renewable portfolio standard (RPS).

Florida could join over 30 other states and the District of Columbia in establishing for the electric utility sector a renewable portfolio standard (RPS), requiring a minimum level of electric generation from renewable sources (usually including solar PV, solar thermal, wind, biomass, hydroelectric, geothermal, landfill gas, and other technologies) by a certain date.

The highest renewable portfolio standards to date are in New York, which is requiring utilities to generate 30 percent of their electricity from renewable sources by 2015; Colorado, requiring 30 percent by 2020; California, requiring 33 percent by 2020; and Hawaii, requiring 40 percent by 2030. Most other states set RPS goals between 10 to 25 percent, with compliance dates generally ranging from 2015 to 2025.

a) Can the policies or programs be implemented under current Florida statutes?

No. The Legislature would need to act.

b) Can the policies or programs be implemented under current FPSC rules? If not, what changes or additions to the rules would be needed?

No.

c) What are the impacts of the policies or programs on system reliability?

Additional investments by utilities in large-scale solar energy systems, which would be a likely outcome of a renewable portfolio standard, in conjunction with investments in smart grid technologies (many of which are needed regardless of the sources of electricity powering the grid) and greater availability of energy storage technologies, would promote overall system reliability and resilience.

d) What are the impacts of the policies or programs on system fuel diversity?

Increasing the share of Florida electricity generated by solar (which has no fuel inputs) would reduce the state's dependence on nuclear and carbon-based fuels, almost all of which have to be imported.

e) Identify the cost-effectiveness of the policies or programs compared to traditional forms of generation.

The expansion of solar energy generation in states with retail prices of electricity similar to or even less than the price in Florida (such as Illinois, Georgia, and North Carolina) demonstrates that solar energy can be cost-effective when the policy environment is supportive.

f) Identify specific costs associated with the policies and programs and who will bear them.

Electricity from solar energy systems is now comparable in cost with electricity from conventional sources in many cases. The cost of the additional solar energy systems would initially be borne by the utility company, but the cost would be recouped from ratepayers.

g) Identify how the policies or programs will be fair, just, and reasonable across the general body of ratepayers.

Given the rapidly-falling prices of solar panels, and the increasing cost-competitiveness of utility-scale solar energy in many markets, it is likely that a large-scale expansion of solar energy in Florida triggered by a renewable energy portfolio would cost no more than the expansion of conventional power sources (especially, nuclear plants, which are very expensive and controversial).

3. Are there any other policies or programs that could promote the deployment of solar energy systems in Florida?

Supportive federal energy policies could promote solar energy in Florida, but those are outside the purview of the State of Florida and the Public Service Commission.