



June 23, 2015

Chairman Graham, Comm'rs. Brisé, Edgar, Brown, and Patronis
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, Florida 32399-0850

Re: Solar Energy in Florida - Request for Comments

Dear Commissioners:

On behalf of the Sierra Club and its more than 30,000 members who live and buy utility services in Florida, we respectfully submit these comments to promote the state's solar energy market, including statements of support from more than 3,300 of our individual supporters in the state.

As discussed below, solar energy is worth promoting—it's cheap, it's clean, and it reduces risk at a time when the state's regulators and utilities are navigating unprecedented risks associated with the changing power sector and climate. The good news is that Florida has tremendous solar power potential, and we are already the least expensive market to invest in solar photovoltaics (PV).¹ Nonetheless, Florida's solar market is nowhere near to meeting its full potential. Therefore, Sierra Club joins many other stakeholders to urge the Commission to adopt certain program and procedural changes with a track record for promoting solar energy so that the benefits accrue to *all* Floridians.

Specifically, we support the complementary recommendations of the Interstate Renewable Energy Council (IREC), Vote Solar, and the Solar Energy Industry Association (SEIA) to: improve interconnection procedures; improve demand-side incentives for residential, commercial, and low-income customers; advance shared solar programs; establish pilot programs to integrate distributed supply-side solar systems under 20 MW; and set clear, enforceable goals for utility-scale development. We also agree with IREC, Vote Solar, SEIA, and other stakeholders that Florida's net energy metering works well and should be extended through aggregated metering. Further, we urge the Commission to require the state's electric utilities to conduct resource planning and competitive bidding processes to identify and invest in all cost-effective solar energy. The latter would enhance transparency and

¹ See US DOE, Photovoltaic System Pricing Trends: Historical, Recent, and Near-Term Projections, 2014 Edition (Sept. 2014), at 11, available at <http://www.nrel.gov/docs/fy14osti/62558.pdf>.

provide the utilities, the Commission, and the public with better information and ultimately better options for promoting solar energy.

1. The Commissions should promote solar energy so that its wide-ranging benefits accrue to all Floridians.

Solar energy is a cost-effective clean energy solution that Florida needs now more than ever. By 2016 solar PV will be as cheap as, or cheaper than average electricity-bill prices in 47 U.S. states with federal subsidies, and 36 states without those subsidies, including Florida.² Further, even under the U.S. Energy Information Administration's conservative forecasts solar PV will compare favorably to natural gas burning technologies through 2040 in terms of levelized avoided cost.³

While Sierra Club and others have previously made the economic case for solar energy to the Commission, the fact is, the case is now stronger than ever. Solar photovoltaics ("PV"), for example, make headlines in the trade press because their cost reductions and deployment rates keep beating expectations.⁴ Florida needs to rapidly grow its demand-side and supply side solar energy to stay competitive and capture the wide-ranging benefits of solar energy. These include: cost predictability; a hedge against natural gas supply and price risks; environmental benefits such as a reduction in water usage, pollutants, and carbon dioxide emissions; and economic development through jobs and tax revenues. Solar can also help meet peak demand and offset the higher operating costs and risks of natural gas-burning generation. Rooftop solar systems can produce large summer peak reductions during hot summer months as systems produce the most power on sunny summer afternoons which coincide with high demand for air conditioning. Studies have shown that residential solar panel systems can cut electricity demand during peak summer hours by 58 percent.

Moreover, investments in solar power accrue to Floridian businesses and families—not out-of-state fossil fuel interests. And the smart policies that we urge the Commission to adopt, outlined above, can spread these wide-ranging benefits to *all* communities, including low-income and fixed-income households for which electric services often prove to be a disproportionate burden.

² . See Bloomberg, While You Were Getting Worked Up Over Oil Prices, This Just Happened to Solar (Oct. 2014), available at <http://mobile.bloomberg.com/news/2014-10-29/while-you-were-getting-worked-up-over-oil-prices-this-just-happened-to-solar.html> (summarizing Deutsche Bank study, enclosed as Exhibit 2).

³ See EIA, Levelized Cost and Levelized Avoided Cost of New Generation Resources in the Annual Energy Outlook 2014 (Apr. 2014) available at http://www.eia.gov/forecasts/aeo/electricity_generation.cfm.

⁴ See, e.g., Eric Gimon and Sonia Aggarwal, Greentech Media, *Driving Blind: The Worst Examples of Outdated Data Skewing Renewable Energy Projections* (June 1, 2015) (citing systematic underestimation of solar cost projections), enclosed as Exhibit 3.


Indeed, the policies that we urge the Commission to adopt will help unlock the solar potential in the state and make it easier for Florida to comply stronger public health and environmental safeguards. Later this year, the U.S. Environmental Protection Agency's will finalize its Carbon Pollution Emission Guidelines for Existing Stationary Sources—Electric Utility Generating Units (“Clean Power Plan”). Achieving the EPA's proposed Florida-specific emission targets in the Clean Power Plan present a pivotal opportunity to diversify Florida's electric system through clean, safe energy efficiency and renewable generation. Increasing electricity generation from renewable energy sources is a cost-effective and achievable compliance strategy for the state to achieve emissions reductions. The Sunshine State has some of the highest solar power potential in the country which can be used to meet EPA's proposed goal while keeping costs down for ratepayers, as renewable energy costs continue to decline dramatically and costs associated with coal, gas, and nuclear generation are going up.

2. Sierra Club's statement of interest

Sierra Club seeks to reduce power sector pollution through equitable public health and environmental safeguards, and through the rapid replacement of fossil fuel-burning generation with competitive clean energy resources. Sierra Club has championed especially those policies and regulations that help overcome barriers to energy efficiency, solar power, and wind power, as low-cost, low-risk alternatives to burning fossil fuels. Sierra Club advocates for such policies and regulations nationwide by intervening, submitting comments, providing testimony, and presenting experts in state and federal energy-related proceedings; participating in public hearings and workshops; speaking with its membership, students, civic organizations, and other stakeholders; and holding seminars and symposia—all to ensure that clean energy solutions reach all communities.

Enclosed please find more than 3,300 public comments from Florida supporters. These comments reflect the vital interest of tens of thousands of Sierra Club's members and supporters in promoting solar energy in Florida through the specific policy changes outlined above. Thank you for the opportunity to comment on this important issue.

Sincerely,

A handwritten signature in black ink, appearing to read "Kelly Martin", with a long horizontal line extending to the right.

Kelly Martin
Senior Campaign Representative, Beyond Coal
Sierra Club

Enclosures:

Exhibit 1: Public comments of support from 3365 Sierra Club supporters in Florida

Exhibit 2: Deutsche Bank Securities Inc Report on Residential Solar, October 26, 2014

Exhibit 3: Driving Blind: The Worst Examples of Outdated Data Skewing Renewable Energy Projections