

December 11, 2013
State Regulation of Public Utilities Review Committee
Energy Advisory Council (EAC)
Room 110, Blatt Building.

To Whom it May Concern,

My name is Chris Carnevale, and I am the Coastal Climate and Energy Coordinator for the Southern Alliance for Clean Energy, also commonly referred to as SACE. I am based out of Charleston, SC. As a regional entity with over 25 years of experience in clean energy advocacy, SACE provides a unique perspective in evaluating the strengths and weaknesses of clean energy policies and regulations. We work on a range of issues throughout the Southeast and are excited for the increasing interest and attention being given to distributed energy resources in South Carolina.

We greatly appreciate the opportunity to provide written and public testimony regarding the Distributed Energy Resources Initial Draft Report. In fact, we view these public engagement opportunities, and transparent public processes in general, as critical to balancing stakeholder interests and to developing effective policies and regulations that utilize the best available information. Please note that our comments here today are primarily concerned with solar photovoltaics (PV).

Solar is a booming industry across the country due to rapid price reductions, business innovation, and consumer and political interests. A thriving solar industry brings with it free market energy options for individuals and businesses, societal benefits in the form of environmental impact reductions and economic development, and quantifiable benefits for utilities and their grid systems. In 2012, there was \$11.5 billion invested in solar installations across the country, supported by a workforce of 119,000 people throughout the solar value chain. Most states in the Southeast have been a part of this market advancement, such as Florida, Georgia, North Carolina, and Tennessee, which currently account for 7,000 jobs in the solar industry.

SACE applauds the EAC's effort in pulling together this first draft report, which will prove a valuable resource for regulators, legislators, and citizens in developing informed perspectives on distributed energy in South Carolina.

At the end of 2012, the Palmetto State had about 4.6 megawatts (MW) of PV capacity, with only one other state – Alabama – having less capacity in the Southeast.¹ A closer look reveals that South Carolina is an order of magnitude behind many of its neighbors. For example, North Carolina has over 300 MW of PV capacity installed today², Florida has about 125 MW³, and Georgia is on track to have nearly 800 MW over the next several years.⁴ In general, these capacity levels are not considered “high penetration” in their respective states. In other words, South Carolina has a ways to go before stepping

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¹ Interstate Renewable Energy Council, *U.S. Solar Market Trends 2012*. July 2013. Found at:

<http://www.irecusa.org/wp-content/uploads/2013/07/Solar-Report-Final-July-2013-1.pdf>

² SEIA. North Carolina Solar page. Found at: <http://www.seia.org/state-solar-policy/north-carolina>

³ SEIA. Florida Solar page. Found at: <http://www.seia.org/state-solar-policy/florida>

⁴ WSJ. Found at: <http://online.wsj.com/article/PR-CO-20130918-909250.html>

foot on the proverbial bridge toward a future electricity market, as discussed in the report.

However, fortunately, as a relatively “untapped” solar market, South Carolina has the advantage of reviewing the practices and results of more advanced solar markets across the country, and learning from their successes.

SACE has several comments to submit for consideration as they relate to this report and to distributed energy in South Carolina, more generally.

First, SACE would like to re-emphasize the importance of pursuing a benefit-cost analysis for solar in South Carolina. Discussions regarding the costs and benefits of solar or other forms of distributed generation, lack merit without an unbiased analysis to support the claims. In particular, these analyses need to be conducted in an open and transparent manner that allows for stakeholder engagement.

A good model to look to is the process currently underway in Minnesota, where legislation passed earlier this year requires the Department of Commerce to lead the development of a value of solar methodology.⁵ That methodology, which is currently being vetted through a public engagement process, will be used by investor-owned utilities to identify their respective value of solar for use in tariffs, that can be optionally utilized by the utilities’ solar customers instead of their current net-metering program.

A transparent process with public engagement is critical to achieving the most accurate and fair results. The importance of this has been demonstrated in Texas, where San Antonio’s “closed” process produced drastically different results compared to the benefit-cost analyses done by Austin, which involved greater stakeholder input.

Closer to home, neighboring states and/or utilities are already pursuing benefit-cost analyses for solar. Georgia Power is about to file a solar-specific avoided cost docket that will provide opportunity for public comment and testimony. The Tennessee Valley Authority is also pursuing a value of solar analysis, and is giving all indication that it will be a process that engages regional stakeholders.

Second, greater discussion is needed on the inhibiting nature of South Carolina’s current net metering and interconnection standards, relative to other states. The U.S. Energy Information Administration (EIA) reports that South Carolina currently has about 1.2 MW of net-metered PV capacity, ranking it 42nd in the country.⁶ This statistic signals that there are market barriers in South Carolina, rather than enablers. In our September 30 comments – attached with this public comment - SACE outlined specific suggestions regarding how net metering rules could be updated to better enable distributed energy development. Of particular note, South Carolina has arbitrary caps on system size and program capacity which have or could inhibit customers interested in solar.

⁵ Minnesota Department of Commerce. Value of Solar Tariff Methodology. Found at: <http://mn.gov/commerce/energy/topics/resources/energy-legislation-initiatives/value-of-solar-tariff-methodology%20.jsp>

⁶ U.S. Energy Information Administration. Form EIA-826 Detailed Data. Monthly release, November 2013, for September 2013 data. Found at: <http://www.eia.gov/electricity/data/eia826/>

Likewise, South Carolina needs to update their interconnection standards to be consistent with the Federal Energy Regulatory Commission's (FERC) recently published Small Generator Interconnection Procedures and Agreements (SGIPs and SGIAs).⁷ The new guidelines will both expedite solar projects and reduce costs.

Third, the report needs greater national analysis of the costs and benefits of third party ownership financing via solar power purchase agreements (sales) and solar leases. This form of financing – allowed in at least 22 states and Washington, DC - has accelerated solar development across market sectors.⁸

- In the residential sector, third party ownership financing accounted for over 50% of all new residential solar installations in most major U.S. residential markets 2012.⁹ By reducing or eliminating upfront costs while also removing the complexities and burdens of ownership, third party financing is expanding solar adoption to younger, less affluent and less educated populations.¹⁰
- For years third-party solar ownership has been a financing vehicle for large and small commercial businesses that have increased interest in incorporating solar systems (and other renewable systems) at their retail centers, warehouses, and manufacturing facilities. As of mid-2013, cumulative commercial deployment totaled 3,380 MW at over 32,800 facilities throughout the country, an increase of more than 40% over last year.¹¹
- Finally, entities that are unable to monetize tax credits, such as federal, state and local governments, as well as churches and non-profit charitable organizations, have leveraged third-party financing to improve the economics of generating solar energy. Military institutions in particular, which have aggressive renewable energy mandates and currently over 130 MW of PV on domestic bases, have a strong interest in utilizing third party financing.¹²

In summary, SACE is grateful for the opportunity to participate in this public process, and hopes that a similar process will be used to conduct a benefit-cost analysis for distributed generation. In parallel to that analysis, adjustments to South Carolina's net metering and interconnection rules, as well as legislative moves to allow for third-party solar sales and leases, will remove burdensome barriers to market development. These changes will create economic gains for the state, and provide ratepayers with more freedom to invest in economic and reliable energy solutions.

⁷ Federal Energy Regulatory Commission. Generator Interconnection. Found at: <http://www.ferc.gov/industries/electric/indus-act/gi.asp>

⁸ Database for State Incentives for Renewables and Efficiency (DSIRE). 3rd Party Solar PV Power Purchase Agreements. February 2013. Found at: http://www.dsireusa.org/documents/summarymaps/3rd_Party_PPA_map.pdf

⁹ Solar Energy Industries Association (SEIA) and GTM Research, "U.S. Solar Market Insight 2012 Year in Review," at: <http://www.seia.org/research-resources/us-solar-market-insight-2012-year-review>

¹⁰ Drury, E., et al. "The Transformation of Southern California's Residential Photovoltaics Market Through Third-Party Ownership." January, 2012.

¹¹ SEIA and Vote Solar. Solar Means Business 2013. Found at: <http://www.seia.org/research-resources/solar-means-business-2013-top-us-commercial-solar-users>

¹² SEIA. Enlisting the Sun. Powering the U.S. Military with Solar Energy. May 2013. Found at: <http://www.seia.org/sites/default/files/resources/FINAL%20Enlisting%20the%20Sun%20Fact%20Sheet%20-%205.15.13.pdf>

Sincerely,

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