CORRESPONDENCE
FEB 15, 2016
DOCUMENT NO. 00848-16

Ashley Quick

From: Office of Commissioner Brown
Sent: Monday, February 15, 2016 1:10 PM
To: Commissioner Correspondence
Subject: FW: SACE Comments for Docket No. 150248
Attachments: SACE Comments-Docket No-150248.pdf

Please place the attached in Docket Correspondence, Consumers and their Representatives, in Docket No. 150248-EG.

From: George Cavros [mailto:george@cavros-law.com]
Sent: Monday, February 15, 2016 11:12 AM
To: Lee Eng Tan; srg@beggslane.com; Filings@psc.state.fl.us; rlmcgee@southernco.com; Jr. John C. Moyle; TRUITT.JOHN@leg.state.fl.us; Office of Commissioner Brown; Office of Commissioner Brisé; Office Of Commissioner Edgar; Office of Commissioner Patronis; Office Of Commissioner Graham
Subject: SACE Comments for Docket No. 150248

Dear Commissioners, Staff, Clerk, and Interested Persons,

Please find Southern Alliance for Clean Energy's comments on the proposed Gulf Power Community Solar Pilot Program (Docket No. 150248-EG) attached to this email.

Thank you,

George Cavros

cleanenergy.org
Southern Alliance for Clean Energy

1.866.522.SACE
www.cleanenergy.org

P.O. Box 1842
Knoxville, TN 37901
865.637.0055

48 Orchard Street
Asheville, NC 28801
828.254.6776

250 Arizona Avenue, NE
Atlanta, GA 30307
404.373.5632

P.O. Box 310
Indian Rocks Beach, FL 33785
954.295.5714

P.O. Box 13473
Charleston, SC 29422
843.225.2371

February 15, 2016

Chairperson Brown, Comms. Brise, Edgar, Graham & Patronis
Florida Public Service Commission
2540 Shumard Oak Drive
Tallahassee, Florida 32399

Re: Docket No. 150248-EG

Dear Commissioners:

On November 19, 2015, Gulf Power Company filed a petition with the Commission requesting approval for its Community Solar Pilot Program. Southern Alliance for Clean Energy (SACE) provides the following comments to assist the Commission in evaluating the proposed solar program.

SACE strongly supports the development of solar energy as an increasingly cost effective generation resource with no fuel costs, no fuel volatility and no significant environmental impacts from its production. Utility customers benefit from a robust solar energy market with a diversity of technology and ownership structures—both utility-owned and non-utility owned.

Best practices in community solar (shared renewable energy) programs are based on several core concepts: 1) the programs should expand renewable energy access to a broader group of customers, including those who cannot install renewable energy on their own properties; 2) participants in the program should receive tangible economic benefits on their utility bills; 3) the programs should be flexible enough to account for energy consumers' preferences; 4) and lastly, the programs should be additive to and supportive of existing renewable energy programs.[1]

Gulf Power is to be commended for its effort to expand renewable energy access to a broader group of customers. Many customers, including half of those who own their own homes,[2] are unable to install rooftop solar systems due to the location and orientation of their homes, residence in multi-family buildings, the condition of their roofs, their status as renters, or for other reasons. Community solar projects give these individuals access to solar energy.

That said, while Gulf Power's program is directionally correct in advancing community solar development in its territory, it lacks a meaningful value proposition for customers, which could negatively impact its subscription rates and ultimately the success of the program. In order to improve the value proposition, the company should consider identifying and measuring additional values to the solar-generated electricity that the project will provide to company.

---

[1] Interstate Renewable Energy Council Report *Model Rules for Shared Renewable Energy Programs* (June 2013), available at: http://www.irecusa.org/publications/model-rules-for-shared-renewable-energy-programs/

[2] National Renewable Energy Laboratory Report *Shared Solar: Current Landscape, Market Potential, and the Impact of Federal Securities Regulation* (April 2015), available at: http://www.nrel.gov/docs/fy15osti/63892.pdf.

The value proposition offered by the Community Solar Pilot program design does not provide a net economic benefit to participants, nor provide a meaningful hedge against rising electricity bills, and the program may therefore turn out to be undersubscribed. Customer interest in solar, including community solar, is driven by the economic benefit.[3] However, this project will result in a net cost to participants, who will pay $89-99 annually for a subscription representing 746 kWh of annual energy,[4] and receive a bill credit for only about one-quarter of that amount each year – $2.15 monthly or $25.80 (12 x $2.15) – from the energy produced by their subscription share.

The tangible economic benefit for potential subscribers could be increased through several avenues. First, a competitive bid process is needed to achieve the lowest possible per watt cost for the proposed system. Conversations with large-scale solar developers active in the Florida market indicate they were unaware of the Request for Proposals, and it may be possible to lower the overall revenue requirement through a more inclusive competitive bid process. Gulf has informed the commission that the installed cost of the facility is approximately $2.6 million, equivalent to a cost of $2.6/watt. However, by the third quarter of 2015, the average cost of a fixed tilt utility-scale solar project had declined to less than $1.50/watt,[5] indicating that there may be significant opportunity to reduce the cost of the 1 MW facility.

Second, the bill credit provided to project participants for the solar energy produced by their share of the project should be expanded to include additional values this energy provides Gulf Power. Under the current program design, the bill credit is based on the solar-weighted average annual avoided energy credit using projected hourly output, currently $0.034/kWh.[6] Because Gulf will own and operate the asset as a generation resource, the value paid to customers should include at a minimum a capacity credit, but should also consider including values from reduced environmental compliance costs and fuel hedging benefits. These benefits are identifiable and quantifiable:

- In reference to capacity, even if there is no immediate capacity need, the solar project still provides value to customers in terms of reduced Loss of Load Probability (LOLP). While it may not be appropriate to value that capacity at full value, it could be recognized at a discounted value, considering that it gives Gulf additional flexibility in scheduling maintenance and also reduces the chance of needing to turn to oil units or other high cost generation in the event of forced outages or unexpected high loads in the summer.

- The Commission has a history of recognizing reduced environmental compliance cost benefits from resources such as energy efficiency[7] and even nuclear energy[8]. In fact, Section 403.519(4)(b)3., Fla. Stat., requires the Commission to consider air emission compliance costs

---

[3] *See* 2015 focus groups conducted by the Solar Electric Power Association for *Community Solar Program Design Models* report (December 2015) available at https://www.solarelectricpower.org/media/422095/community-solar-design-plan_web.pdf; see also 2103 study by The Solar Foundation in *National Solar Jobs Census 2013: The Annual Review of the U.S. Solar Workforce* (January 2014), available at http://pre.thesolarfoundation.org/sites/thesolarfoundation.org/files/TSF%20Solar%20Jobs%20Census%202013.pdf.

[4] Florida Public Service Commission, Docket No. 150248-EG, *Gulf's Response to Staff's First Data Request No. 11*, January 4, 2016.

[5] *See* U.S. Solar Market Insight Report, available at http://www.seia.org/research-resources/solar-market-insight-2015-q3.

[6] Gulf Power Company, Petition, Docket No. 150248-EG, Nov 19, 2015, p. 7.

[7] Section 366.82(3), Fla. Stat. ("In establishing the goals, the commission shall take into consideration ... [t]he costs imposed by state and federal regulations on the emission of greenhouse gases.").

[8] Public Service Commission, Order No. PSC-15-0521-FOF-EI, November 3, 2015, p. 8. ("The absence of greenhouse gas emissions continues to be a benefit associated with nuclear generation. Each increase in projected environmental compliance costs for emitting sulfur dioxide (SO2), nitrous oxides (NOx), and carbon dioxide (CO2) have the effect of making a nuclear plant more cost-effective as compared to fossil fuel generation, such as natural gas, coal, and oil.")

in evaluating the need for new electrical generation by power companies. In the context of the proposed solar project, the emission-free, clean, solar electricity generated by the facility should likewise be afforded a value for reducing air emission compliance costs.

- As the state continues to become increasingly more reliant on natural gas as a fuel source, power companies are encouraged to hedge their future fuel costs. That is, to enter into contracts to purchase natural gas at a fixed price in the future. The fees associated with hedging transactions are passed through to customers.[9] Moreover, the contracted fixed prices for natural gas have yielded significant losses for Florida utility customers.[10] Solar power has no fuel costs – hence reducing the overall need by a power company to hedge fuel costs. The elimination of risk of fuel price volatility to the power company and its customers from the solar project should be reflected as an economic benefit to participating customers.

The Southern Alliance for Clean Energy appreciates the Commission's consideration of these comments.

Sincerely,

Toni Nelson
Renewable Energy Manager

[9] *See eg* Fuel and purchased power cost recovery clause with generating performance incentive factor, Docket No. 150001-EI.

[10] Public Service Commission, Order No. PSC-15-0586-FOF-EI, December 23, 2015, p. 6. ("FPL had losses of $3.5 billion for the period 2002 to 2014 for natural gas ($3.162 billion when fuel oil hedging gains are included) and projects hedging losses of $490 million for 2015. DEF incurred $1.2 billion in losses for the period 2002 to 2014 and estimates $196 million in losses for 2015. Gulf Power incurred $127 million in losses from 2002 to 2014 and estimates $44 million for 2015").