

STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH

DOCKET NO. E-100, SUB 155

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	)	NC WARN'S
Rulemaking Proceeding to Implement	)	INITIAL COMMENTS
G.S.62-126.8	)	

PURSUANT TO the Commission's Order Initiating Rulemaking Proceeding, August 30, 2017, now comes the North Carolina Waste Awareness and Reduction Network, Inc. ("NC WARN"), through the undersigned attorney, with its initial comments on the rulemaking to encourage community solar programs.

1. NC WARN is committed to assisting in the development of a community solar program in the Duke Energy service areas and looks forward to reviewing any rule proposed by Duke Energy and the other parties. NC WARN has experience in developing distributed solar programs at the community level and would have staff participate in a rulemaking committee. In its Solarize North Carolina program (cooperating with local "Solarize" programs across the state), 498 families were supplied solar systems with nameplate capacity of 2.7 MW. NC WARN's current Faith in Solar program is partnering with more than 170 faith leaders across the state to install solar panels on churches and other houses of worship.

2. HB 589, codified as G.S.62-126.8, requires Duke Energy Carolinas and Duke Energy Progress to each provide 20 MW of community solar for a total of

40 MW. This is the floor of what the utilities can and should be offering; NC WARN suggests at least 200 MW a year as a reasonable goal over the next three years, then ramped up significantly. When compared to North Carolina's currently installed solar capacity of more than 3,000 MW, 40 MW is at best a trivial addition.

3. Community solar or "shared solar" programs can benefit all ratepayers if properly financed and developed with ratepayer interest in mind. NC WARN believes the following best practices guidelines for community solar programs will be useful to the Commission and the other parties in formulating rules for the community solar energy facility program created by HB589:

- a. Southern Environmental Law Center ("SELC"), "Community Solar: Best Practices for Utilities in the South," July 2, 2015. SELC's summary of best practices was used in community solar programs in South Carolina. [www.southernenvironment.org/uploads/publications/CommSolar\\_Utility\\_Best\\_Practices.PDF](http://www.southernenvironment.org/uploads/publications/CommSolar_Utility_Best_Practices.PDF). For more information on the SCE&G Community Solar program, 2017. SCE&G Community Solar program, 2017. [www.sceg.com/for-my-home/solar-for-your-home/compare-solar-programs?utm\\_source=na&utm\\_medium=vanity&utm\\_campaign=communitysolar#community-solar](http://www.sceg.com/for-my-home/solar-for-your-home/compare-solar-programs?utm_source=na&utm_medium=vanity&utm_campaign=communitysolar#community-solar)
- b. Interstate Renewable Energy Council ("IREC"), "Model Rules for Shared Renewable Energy Programs," 2013. IREC's recommendations of what should be included in community solar programs, including lessons learned from existing programs. [www.irecusa.org/wp-](http://www.irecusa.org/wp-)

[content/uploads/2016/08/Shared-Renewable-Model-Rules-revised\\_082214lp.pdf](content/uploads/2016/08/Shared-Renewable-Model-Rules-revised_082214lp.pdf)

- c. National Renewable Energy Laboratory (“NREL”), U.S. Department of Energy, “A Guide to Community Shared Solar: Utility, Private, and Nonprofit Project Development,” May 2012. NREL’s assessment of various community and shared solar projects.

[www.nrel.gov/docs/fy12osti/54570.pdf](http://www.nrel.gov/docs/fy12osti/54570.pdf)

- d. IREC, “National Shared Renewables Scorecard,” 2017. IREC’s analysis and ratings of current programs across the nation.

[www.irecusa.org/regulatory-reform/shared-renewables/national-shared-renewables-scorecard/](http://www.irecusa.org/regulatory-reform/shared-renewables/national-shared-renewables-scorecard/)

- e. Institute for Local Self Reliance (“ILSR”), “Why Minnesota’s Community Solar Program is the Best,” October 12, 2017. The success of the Minnesota program stems from the use of third-party ownership of the solar systems. <https://ilsr.org/minnesotas-community-solar-program/>

4. In response to the considerations for community solar programs in G.S. 62-126.8(e), NC WARN raises some of the issues and concerns from the IREC model rules and lessons learned from existing programs. The main aspects of a community solar program that should be carefully designed are:

- a. program administration with a potential third-party administrator (and as noted above in the ILSR report on the Minnesota program, the involvement of third-party participants);

- b. the method of allocating the benefits of participation so that the subscribers share in the financial benefits of the system, rather than just being seen as a source of cheap capital for utility investments;
- c. valuation of the energy produced by the system (discussed below);
- d. facility size and location determined to meet local demand and positive benefits to the utility grid; and
- e. facility ownership and its implications for financing.

5. NC WARN maintains that utility community solar programs would be best funded by making retail net metering rates available to subscribers.

However, G.S. 62-126.8(d) states “[t]he offering utility shall credit the subscribers to its community solar energy facility for all subscribed shares of energy generated by the facility at the avoided cost rate.” These rates may be low enough to greatly impede participation in Duke Energy’s programs.

6. The rate proceedings for avoided cost rates are held annually and often highly contested. The avoided cost rates over the years have been variable, contingent on natural gas prices, hedging, value of solar, performance adjustment factors, and the like. See for example, Order Establishing Standard Rates and Contract Terms for Qualifying Facilities, Docket E-100, Sub 148. To be successful, all of the values of distributed solar energy should be included, such as lessening transmission-line “congestion,” adding grid stability and reliability, and reducing the need for higher reserve margins.

7. In addition to the amount of the payback, the stability of the payback to the subscribers is critical for ratepayer acceptance of the program. Costs of

participation and payback should be as transparent as possible, otherwise it is destined to fail.. The first question a homeowner will ask is whether it makes financial sense to participate and there should be adequate information available to make a rational decision. The subscriber's investment should have a firm economic basis, and not just a "feel good" support of solar energy. To accomplish this, the initially offered rates should not decrease over the life of the project, although the payback rates should increase when the avoided cost rates for solar facilities increase.

8. The economics of the community solar program are better for a residential subscriber if electricity bill credits are employed as a means of allocating benefits to program participants. The IREC model rules, page 8, note that delivering benefits by direct payment to participants creates taxable income for the participant as well as potentially raising issues under securities law.

9. To be consistent with the public interest, every effort should be made to make the program attractive to low-income and moderate-income participants. One way to accomplish this is by allowing for payment of subscription fees in installments over time.

10. If Duke Energy wanted to create a community solar program that truly served the community, it would:

- a. allow third party ownership of community solar, so that parties other than Duke Energy could build, own, operate and sell electricity from community solar arrays;
- b. set a goal of far more than 20 MW;

- c. include a low-income set aside program with on-bill financing available;
- d. determine the additive value of community solar placed near to load, and other economic and societal values such as low pollution, water use and carbon emissions; the reduced transmission and distribution costs, and value to the grid; and
- e. integrate community solar programs with efficiency and other utility programs to help reduce customers' overall electricity use.

Respectfully submitted, this the 25th day of October 2017.

/s/John D. Runkle

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John D. Runkle  
Attorney at Law  
2121 Damascus Church Rd.  
Chapel Hill, N.C. 27516  
919-942-0600 (o)  
[jrunkle@pricecreek.com](mailto:jrunkle@pricecreek.com)

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the foregoing NC WARN'S INITIAL COMMENTS (E-100, Sub 155) upon each of the parties of record in this proceeding or their attorneys of record by deposit in the U.S. Mail, postage prepaid, or by email transmission.

This is the 25<sup>th</sup> day of October 2017.

/s/John D. Runkle

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Attorney at Law