

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-2, SUB 1169
DOCKET NO. E-7, SUB 1168

In the Matter of:)
Petition for Approval of Community Solar) NCSEA’S REPLY
Program) COMMENTS

NCSEA’S REPLY COMMENTS

The North Carolina Sustainable Energy Association (“NCSEA”), an intervenor in the above-captioned proceedings, files these reply comments pursuant to the *Order Establishing Proceeding to Review Proposed Community Solar Program Plan* issued by the North Carolina Utilities Commission (“Commission”) on January 26, 2018, as modified by the Commission’s March 20, 2018 *Order Granting Extension of Time* and also as modified by the Commission’s May 3, 2018 *Order Granting Second Extension of Time* and also as modified by the Commission’s June 5, 2018 *Order Granting Motion for Leave to File Additional Reply Comments*.

I. BACKGROUND

On January 23, 2018, Duke Energy Carolinas, LLC (“DEC”) and Duke Energy Progress, LLC (“DEP”) (DEC and DEP, collectively, “Duke”) filed *Duke Energy Carolinas, LLC’s and Duke Energy Progress, LLC’s Joint Petition for Approval of Community Solar Program Plan Under N.C. Gen. Stat. § 62-126.8* (“*Petition*”). In its *Petition*, Duke outlined its proposal to implement the requirements of N.C. Gen. Stat. § 62-126.8 (“Community Solar Program”), which would give “customers the ability to participate in and receive the benefits from distributed solar photovoltaic (‘PV’) resources without having to install, own or maintain a system of their own.” *Petition*, p. 1.

On April 13, 2018, NC Warn, Inc. (“NC Warn”), the Public Staff – North Carolina Utilities Commission (“Public Staff”), the Sierra Club (“Sierra Club”) and NCSEA filed initial comments in this docket. After the filing of those intervenors’ initial comments, Duke reached out to certain intervenors to discuss an overhaul of their proposed Community Solar Program. In its revised plan, Duke sought to initiate a program which included a lower upfront customer subscription fee, monthly on-bill credits and an associated net monthly bill, and larger capacities for the community solar projects – all which NCSEA supports. However, NCSEA objects to the revised Community Solar Program on a whole as it calls for an unnecessary delay and is much too costly. NCSEA seeks a Community Solar Program, implemented immediately, which would allow for reasonable return on investment for those customers interested in said program. The revised Community Solar Program proposed in the *Reply Comments of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC* (“*Duke’s Reply Comments*”) will, if implemented, fail due to the extremely high customer costs projected in *Duke’s Reply Comments*.

II. THE PROPOSED TIMELINE IN DUKE’S REVISED PROPOSAL IS UNACCEPTABLE AND LACKS STATUTORY SUPPORT

Duke has “adjusted the structure” of the Community Solar Program Plan following review of the initial comments of the intervenors in this docket, and has sought to postpone the implementation of this program until either 2021 or 2022 in DEP territory and either 2022 or 2023 in DEC territory¹. Duke attributes this delayed rollout to the combination of

¹ It is unclear when Duke proposes to implement the Community Solar Program. Duke has suggested multiple implementation dates: “[t]he Companies now plan to align the launch of the Program to the new Duke Energy billing system, Customer Connect, which is currently scheduled to be implemented in DEP in early 2022 and DEC in early 2023” *Duke’s Reply Comments*, p. 4; “[t]he Companies currently project that Customer Connect will be fully deployed in DEP in 2021 and in DEC in 2022.[...] Because Customer Connect will not be available until 2021 in DEP and 2022 in DEC, in developing the originally proposed Program the Companies did not believe that interested parties would support launching the Program with Customer Connect.” *Duke’s Reply Comments*, p. 7.

the Community Solar Program Plan implementation with the rollout of Duke's new Customer Connect software which, according to Duke, "will allow for the use of a subscription model and for greater flexibility to implement ongoing subscription charges" and will result in a decrease of the upfront subscription fee and, also, the ability for on-bill credit. *Duke's Reply Comments*, p. 4. NCSEA notes that the Community Solar Program being implemented in 2022 and 2023 in the respective territories does not align with the Customer Connect timeline set forth in the most recent DEP and DEC General Rate Cases. *See, In the Matter of: Duke Energy Carolinas, LLC Application for Adjustment of Rates and Charges Applicable to Electric Utility Service in North Carolina*, Tr. 18, p. 272; *See also, In the Matter of: Duke Energy Progress, LLC Application for Adjustment of Rates and Charges Applicable to Electric Utility Service in North Carolina*, Tr. 9, p. 145. Therefore, NCSEA specifically objects to such an extended timeline as being not only needlessly long and without statutory support, but also inconsistent with the timeline previously presented by Duke.

Even assuming Duke intends to launch the Community Solar Program in 2021 and 2022 in the respective territories, this delay is unacceptable. First, Duke has not provided a specific reason for the delay aside from its connection to the Customer Connect software. While the rollout of the Customer Connect software may reduce some costs associated with the Community Solar Program Plan, Duke has not yet substantiated any such reduction in costs from the costs in the initial program. Further and as set forth more fully below, any proposed reduction in costs is clearly not reflected in the costs and fees placed upon the customers in the revised Community Solar Program Plan. Duke seems to claim that on-bill credits and monthly payments (rather than a cost-prohibitive upfront fee) require

connection to the new Customer Connect software as the current system would be too costly², but fails to provide a model for comparison where on-bill credits and monthly payments are implemented *immediately*, such as a third-party solution offering service of on-bill credits and monthly payment repository or some other cost-neutral or cost-beneficial method to implement the new program immediately. Duke's proposal to change to an on-bill credit and making the program a monthly-payment type subscription to appease the intervenors does not, in NCSEA's view, provide Duke with carte blanche to significantly delay the program or greatly increase the underlying customer costs and NCSEA requests the Commission reject any such delay in time or exponential increase in costs.

III. THE PROPOSED REVISED COMMUNITY SOLAR PROGRAM IS TOO COSTLY

Duke's revised program proposes an exponential rise in the prices for a customer to participate in the Community Solar Program. In the initial proposed program, Duke projected that a customer would have to pay a one-time \$500.00 subscription fee to share solar generated by a one megawatt ("MW") solar energy facility. *See, Petition*, p. 9. Duke also initially projected that the customer would, over the course of a twenty-year subscription term, accrue \$420.00 in solar credits. *Petition*, p. 10. Therefore, the net cost of the subscription fee and the projected solar credits was \$80.00 over the life of the program. Incidentally, Duke's initial proposal did not connect the Community Solar Program to the implementation of Customer Connect. *See Generally Id.*

² *See, Duke's Reply Comments*, p. 7.

In its revised Community Solar Program Plan, Duke projects a lowered upfront subscription fee of \$295.20 for a customer to connect to a 1 MW facility *and* an additional monthly fee of \$15.19 for the same 20-year term³. *See, Duke's Reply Comments*, p. 11. The gross costs of the program contained in the revised Community Solar Program would therefore be \$3,940.80, or an increase of \$3,440.80 from the initial \$500.00 proposed subscription fee.

However, despite the clear math, Duke appears to contend that its revisions to the program subscription blocks and higher monthly solar output would allow for the program to return more money to its subscribers. Duke revised the program to allow for subscription blocks in the amount of 1 kilowatt of solar energy, over the fixed 20-year program term, which Duke projects to produce 159 kilowatt-hours (“kWh”) per month on average. *Id.*, p. 18. This is a marked change from the terms proposed in the initial petition – each subscription block initially was proposed to represent 220 watts of solar energy producing 35 kWh per month fixed over the term of the program⁴. *Id.* Duke stated that this change “will result in fewer subscriptions per project, it *will also produce greater avoided cost credits* over the course of the 20-year term due to the larger block size.” *Id.* (emphasis added). Duke projects the estimated avoided cost credit to increase from \$420 as projected in its *Petition* to “approximately \$1900” under the revised Community Solar Program. *Id.*

³ Duke also set forth projected prices to connect to a 3 MW facility and a 5 MW facility. A customer would have to pay \$164.04 in its upfront subscription fee and a \$13.02 monthly fee on a 3 MW facility and a \$137.81 upfront subscription fee and a \$12.58 monthly fee on a 5 MW facility. Costs to connect to a 3 MW facility over the 20-year PPA total \$3,288.84 and for a 5 MW facility total \$3,157.01. *Duke's Reply Comments*, p. 11.

⁴ NCSEA generally supports the expansion of the potential facility sizes allowed in the RFP process and does not specifically object to the increase in the solar block size. However, NCSEA does object insofar as these program changes have caused Duke to increase the delay in implementation of the Community Solar Program or have caused the proposed exponential increase in customer costs.

The issue, according to Duke's own projections, is that under the revised proposal a customer would spend at least approximately \$2,000.00 over 20 years to participate in the Community Solar Program on a 1 MW facility following the assessment of the upfront subscription fee and recurring monthly fees along with the projected solar credits. By contrast, the proposed initial program would only cost the customer a minimum of \$80.00 (per Duke's projections) over the same 20 years. The proposed increase in cost between the initial plan and the revised version is a more than twenty-five-fold increase in costs for the program *and*, as set forth above, a customer now will not be able to participate until at least 2021. When considering customer cost and timing of implementation, the revised plan is a significantly *worse* program than the initial program despite the additions Duke has made to acquiesce to the intervenors' initial comments. Additionally, Duke admits in its Reply Comments that the revised Community Solar Program will *reduce* the number of subscribers, which is counter to the spirit of the underlying statute.

NCSEA, and some of the other intervenors, advocated for on-bill credits, monthly payment plans for the program and a lowered (or eliminated) upfront cost. *See generally, NCSEA's Initial Comments.* Duke has provided those elements, which are useful, but the associated new costs added to the program are untenable. Furthermore, under the current statutory regime and substantial out of pocket costs for this proposed program, customers may reap more financial benefits and achieve greater personal satisfaction by forming a limited liability corporation with his or her neighbors to develop a solar project and pursue a Public Utility Regulatory Policies Act ("PURPA") standard option 10 year PPA for Qualifying Facilities (QFs) in North Carolina contracting to sell one MW or less of capacity than subscribe to this proposed revised Community Solar Program (see *Order Establishing*

Standard Rates and Contract Terms for Qualifying Facilities, Docket No. E-100, Sub 148, October 11, 2017).

Duke's proposed revised Community Solar Program projects a lower number of subscribers, a significantly higher cost to those subscribers and a significant delay in program launch. NCSEA objects to these conditions and believes that Duke should propose a more cost-effective program, without delay, which projects the highest number of subscribers while still following statutory guidelines.

IV. THE REVISED COMMUNITY SOLAR PROGRAM ASSIGNS A MUCH HIGHER RATE TO THE PPA THAN THE PROPOSED BILL CREDIT AVOIDED COST RATE

In the revised Community Solar Program, Duke assigns to the proposed 20-year power purchase agreement ("PPA") a cost rate in their "Shared Solar Community Costs Summary" tables for all three proposed sizes – 1 megawatt/jurisdiction, 3 megawatt/jurisdiction and 5 megawatt/jurisdiction (the three tables, collectively the "Shared Solar Customer Costs Summary") – in an amount of \$65.00 per megawatt hour. *Duke's Reply Comments*, p. 11. Duke's \$65.00 is based upon Duke's South Carolina community solar program RFP bids and has no connection to North Carolina law or the North Carolina avoided cost rate ("[t]he \$65/MWh estimate is appropriate and is based on updated bids for the South Carolina shared solar RFP received in 2017." *Id.*, p. 25.) In the same Shared Solar Customer Costs Summary contained in the revised Community Solar Program plan, Duke also proposes that the bill credit for the customers be applied to their bill at a rate of \$50.00 per megawatt hour based upon the current avoided cost rate. *Id.*, p.11. Duke attributes this amount to

The relatively large discrepancy between the PPA rates and the avoided-cost rate in Duke's revised proposal is not supported by evidence or statute. Duke's proposed a PPA rate of \$65.00 bears no relationship to the approved avoided cost rate. As Duke has noted in the past, solar energy now costs *less* than the avoided cost rate but now, within this docket, they have changed their position⁵. There is no legitimate reason for the relatively large discrepancy between the PPA rate and the avoided cost rate allotted to the customers by statute.

NCSEA recommends that Duke analyze its potential costs and then submit to the Commission a revised proposed PPA contract with more specific prices and fees and only upon review of more concrete evidence of the costs and fees should the Commission approve Duke's proposed PPA, likely at a price point much closer to the avoided cost rate. Duke argues that PPA pre-approval is "not contemplated by the statute or Rule 8-72 and [Duke] believes that such a requirement would unnecessarily delay Program implementation. *Duke's Reply Comments*, p. 24. NCSEA notes that Duke here references an unnecessary delay to a program that it has already proposed to delay for three or four years. Duke has not shown how the authorization of PPA contracts by a Commission will further delay the program beyond the delay already sought by Duke. In fact, Duke suggests that the program RFP will be released within "90 days of the Commission approval of this Program." *Id.*, p. 32. Therefore, Duke plans to begin the RFP process within 90 days of

⁵ "In contrast to the current uncoordinated and unconstrained PURPA marketplace for solar development, the Companies believe a proposed competitive market solar solicitation process would provide superior value for our customers and attract the most competitive solar projects at a cost potentially lower than the current avoided cost rates." *Joint Initial Statement and Proposed Standard Avoided Cost Rate Tariffs of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC*, NCUC Docket No. E-100, Sub 148, In the Matter of Biennial Determination of Avoided Cost Rates for Electric Utility Purchases from Qualifying Facilities – 2016 ("2016 Avoided Cost Docket"), pp. 6-7; *See also, Direct Testimony of Glen A. Snider on Behalf of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC* filed in the 2016 Avoided Cost Docket, NCUC Docket No. E-100, Sub 148, p. 31.

Commission approval, but customers will not be able to join program until at least 2021 when Customer Connect is deployed. While NCSEA objects to this delay in customer utilization in the Community Solar Program, there is a clear cushion of time between when the program may be approved and when customers may utilize the program during which Duke could propose specific PPAs to the Commission for approval.

In response to Duke's concerns in the "Avoided Cost" section of the Reply Comments (pp. 24-25), NCSEA is amenable to a recurring Commission approval process wherein Duke's proposed PPAs can be resubmitted on a yearly basis (or in some other agreed-upon interval amount of time) to allow the Commission to review and to reflect current variables related to the pricing set forth in the PPA. Duke's current proposal for \$65.00 per megawatt hour PPA price based upon the price set in South Carolina in 2017 is not based in rule or statute and causes an unfair discrepancy between cost of power generated and credits allowed for the customer.

V. **THE REVISED COMMUNITY SOLAR PROGRAM DOES NOT OFFER SUFFICIENT LOW-INCOME CUSTOMER INCENTIVES**

In *Duke's Reply Comments*, Duke states that "the best approach with regard to [LMI Customers] is to utilize the learnings and experience gained through Tranche 1 to evaluate the potential for low income customers to participate in the Program in the future." *Id.*, p. 27. Duke notes that the Community Solar Program, by statute, cannot be subsidized by other subscribers and, according to Duke, an LMI program may cause such subsidy. Duke further states that the entire program will need to be reevaluated after Tranche 1 has been completed for potential low-income related potential modifications. *Id.*

NCSEA has concerns that under the proposed tranche-based program, Tranche 1 customers may be unfairly burdened with additional costs that later tranches may not have

to incur. Such an initial burden presents higher costs and monthly fees which will render the program difficult to get off the ground. However, NCSEA is generally supportive of Duke continuing to consider potential alterations to the program to make it more cost-effective and financially reasonable for more customer classes, including specifically low-income customers. NCSEA supports Sierra Club's proposed modification to allow for third parties to provide independent funding assistance to low income subscribers who wish to subscribe to the program and Duke, to their credit, does not object this idea. NCSEA requests that Duke provide its customers with an ability to make donations to support LMI customer access to Community Solar subscriptions. This can be accomplished via an online portal for donations or, alternatively, a request to customers to be a recurring monthly donor to low-income solar projects, including projects that would fall under the Community Solar Program.

VI. CONCLUSION

Duke's revised Community Solar Program, as currently proposed, exponentially increases costs to the customer and delays the program deployment date by approximately three years. While NCSEA appreciates Duke's efforts to include on-bill credits, a lower upfront cost and allow for more diversity in solar facility project size, the associated changes to the program in terms of time and cost is too great. Additionally, Duke has sought PPA rates which are substantially higher than the amount credited to the customer without legal or factual justification for such disparity.

NCSEA believes that Duke should reformat the program and combine the ideas of a lower, upfront cost and monthly payments/credits proposed in the *Duke Reply Comments* to a program with associated net cost more in-line with the initial program or, even better,

a projected program cost to allow for Community Solar customers to have a net zero energy payment over the life of their contract. Only a cost-neutral or beneficial plan will allow for the Community Solar Program to attract customers across the income spectrum. NCSEA further requests for the Commission to direct Duke to submit a form PPA to be subject to re-approval by the Commission. Finally, NCSEA requests that the Commission direct Duke to implement this program in a commercially reasonable amount of time following the entering of the Commission Order approving the final version of the program and deny Duke's request to delay the program until at least 2021.

Respectfully submitted, this the 25th day of June, 2018.

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CERTIFICATE OF SERVICE

I hereby certify that all persons on the docket service list have been served true and accurate copies of the foregoing Comments by hand delivery, first class mail deposited in the U.S. mail, postage pre-paid, or by email transmission with the party's consent.

This the 25th day of June, 2018.

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