

STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH

DOCKET NO. E-2, SUB 1167  
DOCKET NO. E-7, SUB 1166

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of  
Application of Duke Energy Progress, )  
LLC, and Duke Energy Carolinas, LLC )  
Requesting Approval of Solar Rebate )  
Program Pursuant to N.C. Gen. Stat. )  
§62-155(f) )

**INITIAL COMMENTS OF THE  
PUBLIC STAFF**

NOW COMES THE PUBLIC STAFF – North Carolina Utilities Commission, by and through its Executive Director, Christopher J. Ayers, and respectfully submits initial comments on the Solar Rebate Program Annual Report (“Report”) filed by Duke Energy Carolinas, LLC (“DEC”), and Duke Energy Progress, LLC (“DEP”) (collectively, “Duke” or “the Companies”) in the above-captioned docket on April 1, 2020.

On April 7, 2020, the Commission issued an *Order Allowing Comments on 2019 Annual Report*, which requested the Public Staff and other parties to file initial comments addressing the Report on or before June 5, 2020, and to file reply comments on or before July 6, 2020.

The Public Staff has reviewed the Report filed by Duke and the requested amendment to the program. The Report provides a summary of program activities in 2019 and requests approval of an amendment to its Solar Rebate Program to address program difficulties experienced when the 2020 enrollment period opened on January 2, 2020.

In its Report, Duke discusses the Solar Rebate Program going forward for program years 2021 and 2022. In summary, the Report (1) does not recommend any changes to the incentive amounts; (2) promises increased marketing activities targeted towards non-profits, the only rebate category not fully subscribed; and (3) proposes two enrollment periods for 2021 and 2022 to attempt to lessen the rush of applications experienced on the first day of enrollment. The Public Staff addresses each of these in turn, as well as raises additional issues for the Commission's consideration.

With regard to the solar rebate incentive amounts, the Public Staff notes that the current incentive amounts were included as part of the original program application filed by DEC and DEP on January 22, 2018, prior to the utilities gaining any experience in North Carolina on the customer response to the incentive amounts. These amounts were based in part on the price of installing solar systems at the time. The Public Staff notes that the Lawrence Berkeley National Lab (LBNL) estimates that over the 2017-2018 period, residential and small non-residential solar installations dropped across the country by a median of \$0.2 per watt, which was consistent with trends over the prior five years.<sup>1</sup> These estimates align with many other sources, which point to continued declines in solar installation costs across the country, including in North Carolina, although at a slower rate than from 2009-2014. The Public Staff also notes that the demand for the solar rebates at their current incentive amounts is extraordinary, vastly

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<sup>1</sup> Barbose, G., and N. Darghouth. 2019. Tracking the Sun: Pricing and Design Trends for Distributed Photovoltaic Systems in the United States. Berkeley, CA: Lawrence Berkeley National Laboratory, at 18.

outstripping the available supply, for all customer classes but non-profits. In addition, a significant percentage of the applicants have already installed their system when they apply for the rebate.

With these facts in mind, the Public Staff believes that an adjustment to the rebate amounts is warranted going forward to ensure that the incentives being offered for each customer class are reasonable. Specifically, the Public Staff proposes a revenue-neutral adjustment that would reduce the residential and non-residential rebates while increasing the non-profit rebates, as described in the Table below. We estimated the impact on Solar Rebate Program costs over the next two years and believe the proposed rebate amounts below would result in higher participation from non-profits and lower overall program costs associated with residential and non-residential customers. The Public Staff recognizes that this reduction in rebates may affect some customers who currently plan to install their systems beginning in October 2020 and would then be eligible to apply in January 2021; however, we note that rebates, including the specific amount of each rebate, is never guaranteed for any customer.

<b>Customer Class</b>	<b>Current Rebate (\$/W)</b>	<b>PS Proposed Rebate (\$/W)</b>	<b>Delta</b>
Residential	0.60	0.50	-17%
Non-Residential	0.50	0.40	-20%
Non-Profit	0.75	1.00	+33%

The Public Staff agrees with Duke that increased marketing to non-profits, including city governments, is an important aspect of increasing non-profit participation in the Program. To the extent that this increased marketing activity

increases Program costs for marketing, this increase should be used to reduce the Public Staff's proposed non-profit rebate amount from the above table in order to maintain revenue-neutrality.

Finally, the Public Staff addresses Duke's proposed twice-annual enrollment period. As an initial matter, the Public Staff notes that increasing the number of enrollment periods will necessarily increase the administrative costs associated with the Program. The Public Staff requests that Duke estimate the increased administrative costs and reduce the residential and non-residential rebates in order to cover any increased administrative costs.

Regarding the biennial enrollment window, the Public Staff is concerned that instead of solving the problems experienced during the single enrollment window in 2020, some of the same challenges would be faced twice a year, instead of only once. In addition, the Public Staff expects that the solar industry would still experience a drop off of installations in the period between when the subscription limit is reached and the beginning of the 90-day window for the next enrollment period – similar to the current drop off experienced today.

The Public Staff believes that rather than adding a second window, which would likely increase the number of applications being both submitted and rejected each year, as well as creating two windows where solar rebate customers and installers would be competing in a very short timeframe for an even smaller amount of solar capacity available during each enrollment window, a more appropriate solution at this time would be for Duke to change the way it awards solar rebates

entirely, moving from a first-come-first-served program to a lottery program. Under such a proposal, Duke would accept rebate applications for a set enrollment period, and at the conclusion of the enrollment period would randomly select proposals from the applicant pool until the subscription limits were reached or the applicant pool exhausted. Lottery approaches have been previously utilized for solar rebate or solar power purchase programs by various utilities where demand for program participation was found to exceed supply,<sup>2</sup> and was also recently adopted by the New Hampshire Public Utilities Commission for its Renewable Energy Incentive Program for Commercial and Industrial Solar Projects.<sup>3</sup> The Public Staff has raised the lottery approach with solar developers and Duke, and recognizes that the administrative time and costs of setting up such a proposal may pose challenges to implement over the final two years of the Program. However, such changes may be appropriate to ensure that all customers interested in participating in the Program have equitable access to the limited supply of available incentives.

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<sup>2</sup> See, e.g., the City of Anaheim (California) PV Buydown Program, online at: <https://programs.dsireusa.org/system/program/detail/631>; the Made in Minnesota Solar PV Incentive Program, online at <https://programs.dsireusa.org/system/program/detail/5909>; the City of Fort Collins (Colorado) Solar Power Purchase Program, online at: [https://www.fcgov.com/utilities/img/site\\_specific/uploads/Solar\\_Power\\_Purchase\\_Guidelines.pdf](https://www.fcgov.com/utilities/img/site_specific/uploads/Solar_Power_Purchase_Guidelines.pdf); and the Oregon Solar Incentives Program, discussed on page 30 of the National Renewable Energy Laboratories (NREL) report “Distributed Solar Incentive Programs: Recent Experience and Best Practices for Design and Implementation”, online at: <https://www.nrel.gov/docs/fy13osti/56308.pdf>.

<sup>3</sup> See *Order Modifying Program Terms and Reopening Program*, New Hampshire Public Utilities Commission, Order No. 26, 336. (March 6, 2020). Online at: <https://www.puc.nh.gov/Regulatory/Orders/2020Orders/26336e.pdf>.

Respectfully submitted this the 5th day of June, 2020.

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### **CERTIFICATE OF SERVICE**

I certify that a copy of this Report and Comments has been served on all parties of record or their attorneys, or both, by United States mail, first class or better; by hand delivery; or by means of facsimile or electronic delivery upon agreement of the receiving party.

This the 5th day of June, 2020.

Electronically submitted  
/s/ Tim R. Dodge