#### STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

**DOCKET NO. E-100, SUB 180** 

In the Matter of:	) REPLY COMMENTS
Investigation of Proposed Net	OF THE
Metering Policy Changes	) ENVIRONMENTAL WORKING ) GROUP

Pursuant to the North Carolina Utilities Commission ("Commission") *Order Requesting Comments*, entered on January 10, 2022 in the above-referenced docket, as extended by the Commission's *Order Granting Extension of Time* entered on March 3, 2022, Intervenor, the Environmental Working Group ("EWG"), through undersigned counsel, hereby submits the following Reply Comments regarding the Joint Application for net metering tariff revisions.

EWG's Initial Comments described in detail the reasons why the Commission should outright reject the net energy metering ("NEM") tariff revisions proposed by Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP") (collectively, "Duke" or the "Companies"). The revisions work against public policy goals, violate clear statutory requirements and regulatory best practices, would discourage investment in customer-sited generation and would hinder development of the least-cost, safe and resilient electric system.

With limited exception<sup>1</sup>, the comments submitted by almost all intervenors<sup>2</sup> also urge the Commission to reject outright, or to delay consideration of, the NEM revisions because the proposal is not based on the requisite "investigation of the costs and benefits" of customer sited generation and is, at best, premature until the Carbon Plan priorities and programs are established. Not a single intervenor recommends adoption of the proposed revised NEM tariff without modification, or without concurrent adoption of the Smart Savers Incentive.

Further, there is agreement among intervenors that the proposed NEM tariff does not satisfy the Commission's obligation to establish net metering rates under all tariff designs as required by statute. Finally, the proposed NEM revised tariffs are unjust, unreasonable and discriminatory under the Public Utility Regulatory Policies Act ("PURPA").

The Public Staff, whose statutory duty is to intervene on behalf of the using and consuming public in proceedings affecting rates, stands alone in its conclusion that the Companies' cost of service analysis is a sufficient proxy for the statutorily required "investigation of the costs and benefits of customer sited generation." The Public Staff supports the imposition of the tariffs that would result in a rate increase for NEM customers ranging from 16.59% to 118.53% over current rates, without considering in any meaningful way the benefits of

<sup>&</sup>lt;sup>1</sup> NCEMC, representing wholesale energy suppliers, takes no position on the proposed tariff. NCSEA, SACE & Vote Solar, and SEIA state that the tariff should be approved **only if** approved with the Smart Saver incentive package.

<sup>&</sup>lt;sup>2</sup> The Attorney General's Office recommends the Commission delay a decision until a sufficient investigation has been done of the costs and benefits of customer-sited generation, which may not be possible until later in the Carbon Plan Process.

customer sited generation. They also stand alone in their support of the revised NEM tariff without the Smart Saver incentive.

For the reasons detailed in EWG's Initial Comments and further detailed below, the Commission must reject the Companies' pending Joint Application for revision of NEM tariffs.

#### **INDEX OF ATTACHMENTS**

EWG retained assistance from Karl R. Rábago to evaluate the NEM proposal and the initial comments filed by various intervenors in the present docket, particularly the comments filed by the Public Staff. Mr. Rábago has vast experience in the electric utility regulatory field and has served as an advisor and expert witness in more that 140 regulatory proceedings across the United States. He serves as a contributing authority and advisor in the writing and publication of the National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources ("NSPM-DER"). Mr. Rábago's *Review of the Public Staff Comments and Recommendations Regarding NEM Rate Revision Application,* is attached hereto as **Attachment A** ("Rábago Reply Review").

Attachment A:

K. Rábago: Review of The Public Staff Comments and Recommendations Regarding NEM Rate Revision Application

#### **DISCUSSION**

These Reply Comments focus on particular issues raised within the initial comments filed by other intervenors. Large portions of this discussion draw from the report prepared by Mr. Rábago, which provides more details and citations of

authority. The failure to address an argument here should not be deemed as agreement with any element of the proposal.

# I. With The Exception of the Public Staff, there is Broad Agreement that the Proposed NEM Revision Does Not Meet Statutory Requirements

EWG's Initial Comments established that the Duke proposal fails to meet statutorily mandated requirements that the rates be non-discriminatory and that they be based on a an evaluation of benefits and costs.<sup>3</sup> The applicable statute, N.C. Gen. Stat. §62-126.4, is clear:

(b) The rates **shall be nondiscriminatory** and **established only after an investigation of the costs and benefit of customersited generation**. The Commission shall establish net metering rates **under all tariff designs** that ensure that the net metering retail customer pays it full fixed cost of service...<sup>4</sup>.

### A. The Proposal Is Not Supported by an Investigation of Costs and Benefits

There is broad agreement among Intervenors that the Duke proposal is not supported by an investigation of both benefits and cost of customer-sited generation as required by law. <sup>5</sup> The Attorney General's Office (AGO), which is uniquely positioned to evaluate statutory compliance, concludes

<sup>&</sup>lt;sup>3</sup> EWG Initial Comments, pp. 5-11.

<sup>&</sup>lt;sup>4</sup> N.C. Gen. Stat §62-126.4 (b)(emphasis added).

<sup>&</sup>lt;sup>5</sup> Joint Initial Comments of 350 Triangle, 350 Charlotte, and the North Carolina Alliance to Protect Our People and the Places We Live ("350 Triangle, et al.") (Mar. 29, 2022), pp 12-17; Comments of North Carolina Rooftop Solar Installers ("Solar Installers") (Mar. 29, 2022), pp. 1-3; Joint Initial Comments of NC WARN, NCCSC, and Sunrise Durham ("NC WARN") (Mar. 29, 2022) pp. 9-22; Attorney General's Office (Mar. 29, 2022),pp. 3-4.

that the Comprehensive Rate Design Study relied upon by Duke as its investigation does not satisfy the statutory requirement:

While the Comprehensive Rate Design study investigated the costs of customer-sited generation, it did not analyze potential benefits of customer-sited generation. These potential benefits are many – from reducing carbon emissions by offsetting fossil fuel generation to improving grid resilience – and they should be studied and quantified. <sup>6</sup>

Other intervenors agree with EWG and the AGO that the proposed NEM revision is not based on the investigation required by statute. Those intervenors include 350 Triangle, 350 Charlotte, and the North Carolina Alliance to Protect Our People and the Places we Live ("NC APPL"), Sundance Power Systems, Inc., Southern Energy Management, Inc., and Yes Solar Solutions (collectively "Solar Installers"), NC WARN, North Carolina Climate Solution Coalition ("NCCSC") and Sunrise Movement Durham Hub (Sunrise Durham"). These intervenors likewise point to the myriad potential benefits of customer-sited renewable energy, including environmental benefits, job creation, reduced energy loss on transmission and distribution systems, diminished land use effects, lower right of way acquisition costs, reduced capacity, reduced congestion, and reduced vulnerability of the system to terrorism.<sup>7</sup>

<sup>&</sup>lt;sup>6</sup> Attorney General's Office (Mar. 29, 2022), p. 3.

<sup>&</sup>lt;sup>7</sup> AGO Comments, p. 3, citing Order Amending Net Metering Policy, Docket No. E-100, Sub 83, 4-6 (March 31, 2009)

#### B. The Costs and Benefits Must Be Determined Through an **Independent Investigation Conducted Based on National Standards**

A revised NEM tariff based on Company-generated embedded and marginal costs of service studies is not what was intended by the Legislature when enacting the statute requiring that NEM rates be established after investigation of the costs and benefits. As NC WARN and the Solar Installers both noted, the Legislature intended an independent study to be conducted by the Commission.8 Rep. John Szoka (R-Cumberland), the chief author of House Bill 589 that led to the statute, made that intention very clear:

It's not up to the utility to determine whether net metering is good or bad. . . . We know what that answer will be. We're not putting the fox in charge of the hen house here. That is not the intent."9

As discussed in detail in EWG's Initial Comments, the investigation of costs and benefits should be conducted consistent with the national standard of care set out in the National Energy Screening Project's National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources ("NSPM-DER"), which provides a comprehensive framework of cost-effectiveness assessment of distributed energy resources and guidance on addressing rate impacts and cost shifts. 10 NC Warn likewise points to the NSPM-DER to guide the Commission's

<sup>&</sup>lt;sup>8</sup> Comments of Solar Installers, p. 2; Initial Comments of NC Warn, p. 11.

<sup>&</sup>lt;sup>9</sup> Elizabeth Ouzts, *Energy News Network*, "Energy Bill could see North Carolina" national fight over metering," July 2017, ioin net 17, https://energynews.us/2017/07/17/energy-bill-could-see-north-carolina-joinnational-fight-over-net-metering/ (accessed on March 22, 2022).

investigation.<sup>11</sup> The Solar Installers point to the recent proceedings before the Kentucky Public Service Commission (Case No. 2020-00174, Order (May 12, 2021): and Case Nos. 2020-00349 and 350, Order (September 24, 2021) in which the Commission considered avoided distribution capacity costs and avoided carbon costs in addition to avoided energy, generation capacity costs and ancillary service costs.<sup>12</sup> In those cases, the Kentucky Commission considered the testimony of EWG expert Karl Rábago, highlighting the importance of the NSPM-DER standard to guide any inquiry regarding cost shifts:

The NSPM-DER is a comprehensive document that includes guiding principles, 20 recommended process steps, impact category lists, definitions, and specific guidance on a wide range of issues associated with developing a BCA Framework and conducting cost effectiveness analysis.<sup>13</sup>

These guiding principles are essential to any meaningful investigation of the costs and benefits of customer sited generation as required by statute. The statute is clear in its requirements and the legislative history further indicates the Companies own analysis of embedded and marginal costs is insufficient to meet the statutory requirements. Except for the Public Staff,

<sup>&</sup>lt;sup>11</sup> NC WARN Initial Comments, pp. 12-14.

<sup>&</sup>lt;sup>12</sup> Comments of Solar Installers, pp. 9-10.

<sup>&</sup>lt;sup>13</sup> Revised Direct Testimony of Karl R. Rábago on Behalf of Joint Intervenors, Before the Public Service Commission, Commonwealth of Kentucky, Case No. 2020-0039 and Case No. 2020-0030, <a href="https://psc.ky.gov/pscecf/2020-00350/fitzkrc%40aol.com/03192021023937/Revised Direct Testimony Of Karl R. R%C3%A1bago On Behalf of Joint Intervenors .pdf">https://psc.ky.gov/pscecf/2020-00350/fitzkrc%40aol.com/03192021023937/Revised Direct Testimony Of Karl R. R%C3%A1bago On Behalf of Joint Intervenors .pdf</a> (accessed on May 8, 2022).

there is broad agreement that the NEM rate revision proposed here is not supported by investigation required by statute.

### II. Public Staff Ignores the need for a Full and Transparent Investigation of Benefits and Costs of Solar

The Public Staff, whose statutory duty is to intervene on behalf of the using and consuming public in proceedings affecting rates, stands alone in its conclusion that the Companies' cost of service analysis is a sufficient proxy and expressly rejects any proposal for an independent, unbiased, and comprehensive evaluation. The Public Staff, instead, embraces the private, self-interested and incomplete evaluation that excludes or limits the evaluation of benefits typically assessed in more reliable value of solar studies. At Rather than adopting the Companies' lack of analysis approach, the Public Staff should be raising issues with the lack of information, redefinition of terms, and actual intent of Duke in this NEM proceeding.

### A. There Is No Evidence That NEM Customers are Not Already Paying their Fair Share

Multiple intervenors, including the Attorney General, have raised issue with Duke's nebulous, if not non-existent, cost-benefit analysis of distributed solar that is mandated by statute. In fact, the Companies have provided no proof that a cost-shift from solar to non-solar residential customers actually exists. To the contrary, available data suggests that NEM customers likely already pay their full cost of service. In its initial comments, NC WARN's expert, William Powers,

<sup>&</sup>lt;sup>14</sup> See, Rábago Reply Report, pp. 4-7.

provides a detailed analysis of the very similar tariff application submitted by Dominion Energy South Carolina (DESC) in that state's regulatory process. There, the Public Service Commission of South Carolina (PSCSC) concluded that DESC's "cost shift analysis was flawed and that there was **no significant** cost-shift when the long-term benefits of NEM solar are accounted for." 15

Instead of engaging a cost-benefit analysis to determine if a cost-shift exists (which likely doesn't) the Companies argue that the individual solar customer isn't paying their cost of service (COS), using the minimum system method (MSM). The MSM arbitrarily assigns fixed costs to a portion of the distribution system and unfairly shifts more of these costs onto residential customers simply by virtue of their numbers. As Powers notes, "DEC and DEP residential customers are paying 25 percent more than their full COS." Further, "the *real* cost-shift [from non-residential] onto residential customers is 1,000 times greater than the *alleged* cost-shift from NEM residential customers onto non-NEM residential customers," but instead of focusing on that substantial cost shift, the Companies' proposal focuses on alleged shifts between two sub-sets of residential customers, NEM residential and non-NEM residential, and makes no mention of non-residential NEM customers. This MSM mechanism has nothing to do with Duke's cost-shift analysis for the NEM tariff revision. It is an ongoing

<sup>&</sup>lt;sup>15</sup> NC WARN *et al's* Initial Comments, Attachment A, W. Powers, *Report Responding to Deficiencies in the Duke Energy NEM Application*, p. 13.

<sup>&</sup>lt;sup>16</sup> *Id.* p. 4.

<sup>&</sup>lt;sup>17</sup> Id. p. 5.

effort by the Companies to increase fixed charges across rate design, and the NEM tariff provides another avenue for that effort.

The Public Staff embraces Duke's reliance on its embedded and marginal cost studies as surrogates for the statutorily required investigation of the costs and benefits of customer sited generation, noting that the marginal cost study includes avoided energy, avoided capacity, and avoided T&D costs. In support of NC WARN's initial comments, Powers notes that Duke's T&D calculation is highly suspect for a number of reasons, including an undervalued avoided cost of high voltage transmission (\$935/yr/ 9 kW system v. \$127 to \$247/year avoided T&D value assumed by Duke) and Duke's assumption of deferred rather than avoided transmission costs. Duke assumes that T&D expansion is inevitable to serve its \$1 billion annual investment in utility-scale solar, concentrated in the southeastern portion of the state to serve the concentrated urban areas in western and central North Carolina. Powers concludes:

[T]he substitution of NEM solar in the demand centers of North Carolina where DEC and DEP customers are concentrated would potentially eliminate the need for transmission reinforcement between these demand centers and rural southeastern North Carolina utility-scale solar farms, and potentially for expansion related distribution projects.<sup>19</sup>

Thus, while the Public Staff relies on Duke's flawed calculation of avoided T&D costs as a nominal substitute for an investigation of the benefits of solar, they discount the marginal cost study as merely "informative" and conclude that

<sup>&</sup>lt;sup>18</sup> Comments of the Public Staff, pp. 26-27.

<sup>&</sup>lt;sup>19</sup> NC WARN *et al's* Initial Comments, Attachment A, W. Powers, *Report Responding to Deficiencies in the Duke Energy NEM Application*, pp. 8-9.

the embedded cost study (which includes no consideration of solar's benefits) is the study that "best represents the overall retail rate and revenue situation of the Companies." Lost revenues are not a cost" and do not prove that NEM customers are not already paying their fair share.

B. Where Rates Are Evaluated and Adopted Based on Class Average Not Individual Use – Added Fixed Charges Based on Solar Investment Are Discriminatory and Result in Double Recovery

The residential class may already be paying more than its fair share of costs. 22 n its comments, the Public Staff states that at least "as a whole" residential customers are paying their full, allocated share of fixed cost of service, even though some (high use) customers pay more, and some (low use) customers pay less:

Once approved by the Commission, rate schedules are presumed just and reasonable for the recovery of the full costs to service customers (both fixed and variable costs of service) based on an average level of consumption for each customer as represented by the utility's cost of service study. The embedded cost model results in some residential customers paying more than their share of fixed costs, while others pay less. In other words, higher usage customers pay a higher share of fixed costs and lower usage customers pay a lower share of the fixed costs, but on average, residential customers as a whole are paying their full, allocated share of the fixed cost of service, including both NEM customers and non-NEM customers.<sup>23</sup> (pg.28/29)

<sup>&</sup>lt;sup>20</sup> Initial Comments of Public Staff, pp. 27, para. 43.

<sup>&</sup>lt;sup>21</sup> Initial Comments of EWG, Attachment A, Rábago Report, p. 16.

<sup>&</sup>lt;sup>22</sup> In testimony regarding DEC's 2020 rate case, Wallach argued, "In fact, with distribution plant costs classified in accordance with cost-causation principles, the Company's COSS shows that the residential rate classes in aggregate are currently over-earning relative to the system-average achieved rate of return." p. 24, 25 https://starw1.ncuc.

<sup>&</sup>lt;sup>23</sup> Initial Comments of Public Staff, pp. 28-29, para. 45.

As Mr. Rábago explains in his Reply Report, there is no doubt that within the residential class there are NEM customers paying more than the average bill for the class, yet the Public Staff ignores that these customers are therefore possibly subsidizing all class members.

[W]hile any customer can take action to reduce usage below the class average, the Public Staff is fixated on the alleged but unsupported assumption that when NEM customers reduce their bills below the class average, they are being unjustly subsidized — even without any evaluation of the many benefits that customersited generation offers to the grid and all customers. <sup>24</sup>

That some customers use above-average amounts of power and others below-average amounts is a time-honored and integral part of rate design. High-usage customers create higher burdens on the system thus should pay more — and vice-versa for low-usage customers. In other words, they are both paying their fair amount to the utility. The same goes for solar and non-solar customers. Low energy users are not asked to pay an additional fixed fee for their low energy use. It is the class, not the individual customer, that costs are assigned to, and recovered from. In this application, the Companies are proposing that only some low use customers (those with on-site generation) be assessed additional fees to "reward" their low energy using behaviors achieved through capital investment. However, when the capital investment is from customers rather than the Companies, it will not produce a rate of return in the next rate proceeding. Here, the Companies are simply attempting to reduce customer savings and choice to protect and expand their profit margin.

<sup>&</sup>lt;sup>24</sup> Rábago Reply Report, pp. 6-7.

Similarly, without providing any evidence that larger residential solar systems **are not** paying their full weight, the Companies propose an additional grid access charge on larger residential solar systems to "ensure they are" paying their full freight. Thus, the Companies are seeking multiple opportunities for double recovery from customers with on-site generation capacity without any consideration of the benefits that these systems bring. As Rábago explains, there has been no assessment of NEM and non-NEM customers to determine whether incremental costs are caused by NEM customers. Thus, "[t]he minimum bill and grid access charges have the effect of charging customers for services they did not receive and costs they did not create." <sup>25</sup>

Finally, the Companies claim that energy not used by solar customers is a cost that should be recovered under the fuel adjustment clause. Plant-generated energy not used is not a cost – it's customers using less electricity from power plants, requiring no new construction of transmission lines, less use of existing transmission lines, and efficient use of existing distribution lines. Duke and Public Staff appear to ignore the benefits that customer-sited generation brings to the electric system and all customers within it. Notwithstanding that lost revenue has nothing to do with utility cost, Duke provides no proof that it is actually losing revenue.

In effect, the combination of all of these rate mechanisms the Companies are proposing, without proof of the benefits of solar to justify the additional fixed charges, should raise alarm bells for Public Staff, not sympathy and complicity.

<sup>&</sup>lt;sup>25</sup> Rábago Reply Report, p. 21-22.

Public Staff should be advocating for the using and consumer public and determining, if the NEM proposal is approved, how many times Duke will be recovering the same costs from those residential rate payers.

### III. <u>The Application Advances Piecemeal Ratemaking and Unreasonable Complexity</u>

# A. The Application Does Not Address All Tariff Designs As Required by Statute

The statute is clear that the "Commission shall establish net metering rates **under all tariff designs** that ensure that the net metering retail customer pays its full fixed cost of service..."<sup>26</sup> The Public Staff acknowledges without question that Duke has not proposed net metering tariffs for all retail customers and allows that Duke will propose to address NEM rates for non-residential customers at some undefined "later time." Public Staff "strongly encourages" Duke to engage with stakeholders on non-residential NEM rate design. <sup>27</sup> This encouragement does not meet the statutory requirement and supports piecemeal rate making.

Not only does the proposal not address non-residential NEM customers, but it also likewise fails to provide for NEM options under "all tariff designs", even for residential customers. As intervenor NC WARN points out, currently there are myriad NEM arrangements, including flat rates and rates tied to time of use ("TOU"), that provide customers flexibility to select the most appropriate rate for their needs.<sup>28</sup> However under the proposed tariff, all new NEM residential

<sup>&</sup>lt;sup>26</sup> N.C. Gen. Stat. §62-126.4(b).

<sup>&</sup>lt;sup>27</sup> Public Staff comments at ¶¶ 36-37.

<sup>&</sup>lt;sup>28</sup> See generally, NC Warn Initial Comments, pp. 7-9.

customers after January 1, 2023, "must be served" under a residential rate design tied to TOU and critical peak periods ("CPP")<sup>29</sup>, which periods are to be established in a separate docket and which would force NEM customers to purchase power from the grid at the highest rate. The Duke proposal would transform "all tariff designs" into one mandatory NEM residential rate design.

# B. The Lack of Evaluation of Benefits In Light of Carbon Plan Priorities Further Evidences Piece Meal Ratemaking

Revising NEM tariffs without a cost benefit analysis and without Carbon Plan priorities also evidences a piece-meal rate making approach. The AGO's comments noted that it may not even be possible "to fully quantify [the] benefits until there is more clarity on the role customer-sited generation will play in meeting the carbon reduction goals of House Bill 951," but that residential solar will "undoubted play a significant role" in achieving those goals and "should be a key part of Duke's proposed plans."<sup>30</sup>

The Public Staff takes inconsistent positions on a full and fair evaluation of customer-sited generation. While they support the self-interested and incomplete evaluations on which Duke relies to justify its proposal, the Public Staff nonetheless rejects accounting for the Carbon Plan benefits of private investment in clean energy generation added to the grid by NEM customers, stating that "NEM should be fairly evaluated with all other options . . . if it constitutes a least-

<sup>&</sup>lt;sup>29</sup> See, Joint Application of DEC & DEP for Approval of NEM Tariffs, NCUC Docket No. E-100, Sub 180, Ex. No. 1, pdf p. 30

<sup>&</sup>lt;sup>30</sup> Attorney General's Comments, pp 3-4.

cost step toward compliance."<sup>31</sup> As Mr. Rabago explains, the Public Staff creates a Catch-22 for NEM customers and the rooftop solar industry in North Carolina:

... by denying the public the benefit of a full evaluation of the benefits and costs of customer-sited generation for purposes of reviewing the proposed rates from the Companies but demanding such an investigation as a prerequisite step to evaluating the Carbon Plan benefits in some unspecified future evaluation. At the very least, the Public Staff proposes economic waste; at worst, it proposes discriminatory treatment of customer generators and solar installers. <sup>32</sup>

A comprehensive NEM rate design would take into account policy goals of the Carbon Plan and apply to all tariff designs as required by statute.

# C. The Proposed NEM Revision is Unreasonably Complex and Discriminatory

In his initial report, Mr. Rábago argues that the complexity of the proposals imposes an unfair burden on NEM customers and market participants in North Carolina.<sup>33</sup> The Rooftop Installers and other intervenors confirm the unreasonable complexity of the proposal and its negative impact on the market.<sup>34</sup> The table below provided by the Solar Installers illustrates the charges included on a current NEM bill versus the complex calculation of charges based on the

<sup>&</sup>lt;sup>31</sup> Public Staff Comments at ¶ 50.

<sup>&</sup>lt;sup>32</sup> Rábago Reply Report, p. 9.

<sup>&</sup>lt;sup>33</sup> Rábago Report, pp. 7-8.

<sup>&</sup>lt;sup>34</sup> 350 Triangle, et al. Comments at page 1; Comments of North Carolina Rooftop Solar Installers ("Solar Installers") (Mar. 29, 2022) at pages 4-7; Petition to Intervene and Initial Comments of the North Carolina Electric Membership Corporation (Mar. 29, 2022) at page 6.

proposed tariff.<sup>35</sup> Currently, Solar Installers need 24 energy data points to effectively model solar energy production to help their customers understand and

Current Bill	Proposed Bill
<ul> <li>Energy Charge</li> <li>Basic Facilities Charge</li> <li>Reps Rider Per Month</li> </ul>	<ul> <li>Energy Charge         <ul> <li>Discount</li> <li>Off Peak</li> <li>On Peak</li> <li>Critical</li> </ul> </li> <li>Basic Facilities Charge</li> <li>Reps Rider Per Month</li> <li>Grid Access Fee For &gt;15Wk Per Kwdc</li> <li>Non-bypassable Charge Per Kw</li> <li>Minimum Bill Calc</li> <li>Minimum Bill Charge</li> <li>Total Bill Before Excess Solar</li> <li>Excess Solar Adjustment</li> </ul>

Energy charges on the TOU rates are divided into 4 parts based on when energy is imported or exported from the utility:

- Discount 6.09 cents per kWh
- Off Peak 8.04 cents per kWh
- On Peak 19.23 cents per kWh
- Critical Peak 35 cents per kwh

evaluate an investment in rooftop solar and the likely period for a return on their customer's investment. Under the proposed revision, Solar Installers would need 17,520 data points, including hourly data for both solar and usage data, for a similar calculation, but would not be able to factor in Critical Peak Pricing Rates which are "unknowable." This rate calculation complexity "adds magnitudes of complication to the design process while adding no value for solar system owners" or the grid. The complexity and vagueness of the proposed tariff will

<sup>35</sup> Solar Installer Comments, p. 5.

<sup>&</sup>lt;sup>36</sup> Solar Installer Comments, pp. 5-6.

make it so difficult to estimate solar benefits that there will be "an erosion of confidence in the industry and loss of credibility."37

In response to this complexity, the Public Staff's only offer is to support Duke's generalized "commitment" to develop an online savings calculator within two years of tariff implementation. Public Staff's position that essential customer engagement functions can wait for years is unreasonable. Considering the complexity of the proposed rates and the severe adverse impacts that the proposed NEM rates would have on the distributed generation market, customers must be provided with a meaningful and affordable path for responding to proposed new rates,<sup>38</sup> otherwise, as Rábago explains, the new rates are "just high fixed charges imposed by a rent-seeking monopoly with market power."39

The Companies' proposed NEM rates for residential customers are unreasonably complex and therefore unjustly discriminate against residential NEM customers.

#### IV. **PURPA Does Not Support Limiting NEM Compensation to** Avoided Costs but Does Prohibit the Discriminatory NEM **Rates Proposed**

In its Initial Comments recommending, with only minor revision, the adoption of the proposed NEM tariffs, the Public Staff also recommends the

<sup>&</sup>lt;sup>37</sup> *Id.* at p. 7

<sup>&</sup>lt;sup>38</sup> K. Rábago & R. Valova, Revisiting Bonbright's Principles of Public Utility Rates in a DER World. The Electricity Journal, Vol. 31, Issue 8, § 3.2 (Oct. 2018), available at:

https://peccpubs.pace.edu/getFileContents.php?resourceid=43bdf87a9063c34.

<sup>&</sup>lt;sup>39</sup> Rábago Reply Report, pp.13

Commission "make a determination that NEM facilities are Qualified Facilities under PURPA." The Public Staff provides no discussion regarding the need for the determination, and their intent is unclear. Such a determination by the Commission is unnecessary, because under the federal Public Utility Regulatory Policies Act ("PURPA"), Qualifying Facilities ("QF") status automatically applies to on-site solar generators up to 1 MW.<sup>40</sup>

### A. PURPA Does Not Limit Retail NEM Rates to PURPA Avoided Cost Rates

The Public Staff may be seeking Commission endorsement of QF status for rooftop solar generators to argue that NEM facilities are only entitled to so-called "PURPA avoided costs rates" for exported energy. Mr. Rábago discusses in detail why such a view is erroneous under established federal law and regulation. The Federal Energy Regulatory Commission ("FERC") has made clear in its holdings that there is no sale of energy subject to FERC regulation "when an individual homeowner or farmer (or similar entity such as a business) installs generation and accounts for its dealing with the utility through the practices of netting." Further, "injections of electric energy (by an on-site generator) back to the grid" do not necessarily trigger FERC jurisdiction. Net energy metering, as recognized by FERC decisions and orders, involves retail service regulated by the state at the distribution level, and in which energy

<sup>&</sup>lt;sup>40</sup> 18 C.F.R. §292.203(d)

<sup>&</sup>lt;sup>41</sup> See, Rábago Reply Report, pp. 16-18; and MidAmerican Energy Company, 94 FERC ¶ 61,340 (2001)

<sup>&</sup>lt;sup>42</sup> Id., and Order No. 841, 162 FERC ¶ 61,127 at P 30, n.49 (citing Sun Edison LLC, 129 FERC ¶ 61,146).

produced by the customer will sometimes flow back to the distribution system and that when that happens, a method must be developed to credit the customer for the energy. However, it is state, not federal, authorities that have jurisdiction over net metering because it is the state that has jurisdiction over generation, distribution, and all sales other than wholesale sales in interstate commerce.

# B. PURPA Does Require that Rates for Sales to QFs be Just, Reasonable, and Non-Discriminatory

Federal regulations implementing PURPA, however, do require that rates for electricity sales to QFs "shall be just and reasonable and in the public interest" and "[s]hall not discriminate against any qualifying facility in comparison to rates for sales to other customers served by the electric utility." <sup>43</sup> vBecause QFs are "likely to have the same characteristics as the load of other nongenerating customers of the utility," QFs should be subject to the same rates as non-QFs. <sup>44</sup> In order for the rates applicable to a QF to meet the standard of being just, reasonable, and non-discriminatory, they must be based on accurate data and consistent with system-wide costing principles. A utility may charge a different rate to QFs only if it demonstrates "on the basis of accurate data and consistent system-wide costing principles" that "the rate that would be charged to a comparable customer without its own generation is not appropriate." <sup>45</sup> Absent such data, the rate for sales to QFs "shall be the rate that

<sup>&</sup>lt;sup>43</sup> 18 C.F.R § 292.305(a)(1)(ii).

<sup>&</sup>lt;sup>44</sup> Joint Explanatory of the Committee of the Conference, P.L. 78-617, reprinted in *FERC Statutes and Regulations* ¶ 5151, p. 5105-06; 45 Fed. Reg. 12,214, 12,228 (Feb. 25, 1980) ("FERC Order No. 69").

<sup>&</sup>lt;sup>45</sup> Id.(emphasis added).

would be charged to the class to which the qualifying facility would be assigned if it did not have its own generation."<sup>46</sup>

As discussed in detail in the Report and Reply Report of Mr. Rábago, there are neither accurate data, nor consistent system-wide costing principles that can justify the proposed NEM tariffs that treat generating residential customers so differently from non-generating customers. <sup>47</sup> In this case, Duke proposes, and the Public Staff supports, mandating that NEM customers take service under TOU rates, pay a minimum bill for service that non-generators in the class do not have to pay, to pay a grid access fee (for larger NEM customers) that would impose charges even if the NEM facility did not operate, and to pay non-bypassable charges on the bill even if offset by generation credits. The minimum bill and grid access charges would result in charging energy generating customers for services they did not receive and costs they did not create.

The charges proposed by Duke are unjust, unreasonable, and discriminatory under federal and state law because they were not formulated using cost causation principles, and are not based on a true cost of service study comparing the costs for serving NEM and non-NEM customers.

In its submission of these proposed revised NEM tariffs Duke has failed to satisfy these PURPA principles and regulatory requirements. As the Public Staff suggests, there is no question that customer-sited generation facilities (under 1 MW) are QFs under PURPA. As such, interested persons may petition FERC and

<sup>&</sup>lt;sup>46</sup> *Id*.

<sup>&</sup>lt;sup>47</sup> Rábago Reply Report, pp. 16-22

exercise other legal remedies if NEM tariffs are adopted that discriminate against customer sited solar generators. As discussed above and in the Initial Comments of EWG, and many other intervenors, the proposed NEM tariffs are unjust, unreasonable, and discriminatory. They are the product of confidential settlement negotiations by a few parties and are based on a study of selective and incomplete data by Duke, rather than as required by law, data, and cost causation principals from an independent investigation of the costs and benefits of customer sited generation.

#### V. <u>The Environmental Working Group Supports the Initial</u> Comments of Other Intervenors

The majority of Intervenors in this proceeding share EWG's concerns regarding the proposed tariff revisions and call on the Commission to reject the application at this time. By way of example, not limitation, EWG supports the following positions taken by other Intervenors in their Initial Comments:

- B. An investigation of the costs and benefits of customer-sited generation has not been conducted as required by statute prior to establishing net metering rates;<sup>48, 49, 50, 51</sup>
- C. The investigation of costs and benefits of customer sited generation should be independent and transparent;<sup>52, 53</sup>

<sup>&</sup>lt;sup>48</sup> Comments of the Attorney General's Office, p. 3.

<sup>&</sup>lt;sup>49</sup> North Carolina Solar Installers' Comments, pp. 1-3.

<sup>&</sup>lt;sup>50</sup> Joint Initial Comments of NC Warn, NCCSC and Sunrise Durham, pp. 9-12.

<sup>&</sup>lt;sup>51</sup> Joint Initial Comments of 350 Triangle, 350 Charlotte and the NC Alliance to Protect Our People and the Places We Live (NC APPPL), p. 4.

<sup>&</sup>lt;sup>52</sup> Joint Initial Comments of NC Warn, NCCSC and Sunrise Durham, pp.10-11.

<sup>&</sup>lt;sup>53</sup> Comments of Solar Installers, p. 2.

- D. The investigation of benefits should be determined in light of the Carbon Plan goals and processes;<sup>54</sup> <sup>55</sup> <sup>56</sup>
- E. The Companies' "investigation of costs" does not reflect best practices to determine the costs and benefits of customer-sited generation; <sup>57</sup> <sup>58</sup>
- F. The Companies' cost-shift analysis is deeply flawed resulting in proposed NEM rates that are discriminatory;<sup>59 60</sup>
- G. Proposed NEM rates do not apply to all tariff rate designs as required by statute;<sup>61</sup>
- H. Proposed NEM rates would increase energy costs for NEM customers from 16.6% to more than 100% for some customers;<sup>62</sup> 63 64 65

<sup>&</sup>lt;sup>54</sup> Joint Initial Comments of 350 Triangle, 350 Charlotte and the NC Alliance to Protect Our People and the Places We Live (NC APPPL), p. 4.

<sup>&</sup>lt;sup>55</sup> Joint Initial Comments of NC Warn, NCCSC and Sunrise Durham, pp.24-25.

<sup>&</sup>lt;sup>56</sup> Comments of the Attorney General's Office, pp. 4-5.

<sup>&</sup>lt;sup>57</sup> Joint Initial Comments of NC Warn, NCCSC and Sunrise Durham, pp.12-14, 21-22.

<sup>&</sup>lt;sup>58</sup> Comments of Solar Installers, pp. 8-10 (discussion of proceedings before the Kentucky Public Service Commission).

<sup>&</sup>lt;sup>59</sup> Joint Initial Comments of NC WARN, NCCSC and Sunrise Durham, pp 2, 18-19.

<sup>&</sup>lt;sup>60</sup> North Carolina Solar Installers' Comments, pp. 3, 11-12.

<sup>&</sup>lt;sup>61</sup> Joint Initial Comments of NC Warn, NCCSC and Sunrise Durham, pp.7-9.

<sup>&</sup>lt;sup>62</sup> Initial Comments of the Public Staff, p. 20.

<sup>&</sup>lt;sup>63</sup> North Carolina Solar Installers' Comments, p. 3.

<sup>&</sup>lt;sup>64</sup> Joint Initial Comments of NC WARN, NCCSC and Sunrise Durham, p. 3.

<sup>&</sup>lt;sup>65</sup> Initial Comments of Donald E Oulman, p. 2.

- Proposed NEM rates create a disincentive for NEM investment, discourage customer action to reduce carbon emissions, and exacerbate the climate crisis;<sup>66 67 68 69</sup>
- J. Proposed NEM rates are unduly complex;<sup>70 71</sup>
- K. Proposed NEM tariffs that are tied to TOU rates determined outside this proceeding and that impose higher rates during periods when solar generation is not optimal is unjust and discriminatory;<sup>72</sup> <sup>73</sup>
- L. Proposed NEM rates should be rejected;<sup>74</sup> <sup>75</sup> <sup>76</sup>
- M. Any NEM rate revision should be delayed until after the Commission conducts and completes an independent Value of Solar Study;<sup>77</sup> <sup>78</sup> <sup>79</sup>
- N. Any NEM rate revision should be delayed until after completion of the Carbon Plan process.<sup>80</sup>

Further, EWG incorporates by reference, and adopts in full, the arguments contained within the Initial Comments of NC WARN, NCCSC and Sunrise

<sup>&</sup>lt;sup>66</sup> North Carolina Solar Installers' Comments, pp. 3-4.

<sup>&</sup>lt;sup>67</sup> Joint Initial Comments of NC WARN, NCCSC and Sunrise Durham, pp. 3, 22-24.

<sup>&</sup>lt;sup>68</sup> Initial Comments of Donald E Oulman, p. 2.

<sup>&</sup>lt;sup>69</sup> Comments of the Attorney General's Office, p. 5.

<sup>&</sup>lt;sup>70</sup> North Carolina Solar Installers' Comments, pp. 4-7.

<sup>&</sup>lt;sup>71</sup> Joint Initial Comments of NC WARN, NCCSC and Sunrise Durham, Attachment 1.

<sup>&</sup>lt;sup>72</sup> Joint Initial Comments of NC WARN, NCCSC and Sunrise Durham, p. 2

<sup>&</sup>lt;sup>73</sup> Initial Comments of Donald E Oulman, p. 4

<sup>&</sup>lt;sup>74</sup> North Carolina Solar Installers' Comments, p. 12.

<sup>&</sup>lt;sup>75</sup> Joint Initial Comments of NC WARN, NCCSC and Sunrise Durham, p. 39.

<sup>&</sup>lt;sup>76</sup> Initial Comments of Donald E Oulman, p. 6.

<sup>&</sup>lt;sup>77</sup> Comments of the Attorney General's Office, p. 3.

<sup>&</sup>lt;sup>78</sup> Joint Initial Comments of NC WARN, NCCSC and Sunrise Durham, p. 4.

<sup>&</sup>lt;sup>79</sup> North Carolina Solar Installers' Comments, p. 12.

<sup>80</sup> Comments of the Attorney General's Office, p. 5.

Durham ("NC WARN, et al."). EWG has also reviewed the Reply Comments of NC WARN, et al. and incorporates by reference and adopts the arguments contained therein. Finally, EWG also adopts in full the arguments set out in the Comments of the Attorney General's Office and support the conclusion that more investigation is needed and that carbon reduction goals may be undermined by considering this application prematurely and in isolation from the Carbon Plan process and rebate programs.

#### CONCLUSION

For all of the above reasons and the arguments detailed in the Initial Comments of EWG, and in the arguments of other Intervenors as outlined herein, the Commission must deny the Joint Application for Approval of revised net metering tariffs. The Companies have not demonstrated the proposed rates to be just and fair and within the public interest. As proposed, the rates are discriminatory and in violation of federal statutes. EWG asks the Commission to direct that the existing net metering tariffs remain in effect, until a complete evaluation of the benefits and costs of customer-sited generation is conducted. EWG also requests that the Commission reject portions of the Initial Comments of any intervenor which are inconsistent with EWG's Reply Comments. Finally, the Commission should direct Commission Staff, and such external experts as required, to develop a framework and conduct a cost-benefit evaluation for net metered generation in accordance with the principles, process, impacts, and other guidance in the NSPM-DER. Only upon conclusion of such evaluation should new NEM tariffs for all rate classes be considered by the Commission.

Respectfully submitted this 12th day of May, 2022.

#### /s/ Catherine Cralle Jones

Catherine Cralle Jones N.C. State Bar No. 23733 LAW OFFICE OF F. BRYAN BRICE, JR. 127 W. Hargett St., Ste. 600 Raleigh, N.C. 27601 Telephone: 919-754-1600

Telephone: 919-754-1600 Facsimile: 919-573-4252 cathy@attybryanbrice.com

#### /s/ Caroline Leary

Caroline Leary 1250 I Street NW, Suite 1000 Washington, DC 20005 Telephone: 202-939-9151

Facsimile: 202-232-2597

cleary@ewg.org

\*Admitted pro hac vice

Counsel for Environmental Working Group

### **CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a copy of the foregoing Initial Comments by the Environmental Working Group upon each of the parties of record in these proceedings or their attorneys of record by deposit in the U.S. Mail, postage prepaid, or by email transmission.

This the 12th day of May, 2022.

LAW OFFICE OF F. BRYAN BRICE, JR.

By: <u>/s/ Catherine Cralle Jones</u>
Catherine Cralle Jones

Counsel for Environmental Working Group