

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. E-100, SUB 180

In the Matter of:	)	<u>JOINT PROPOSED PARTIAL</u>
Investigation of Proposed Net	)	<u>ORDER REGARDING THE</u>
Metering Policy Changes	)	<u>JOINT APPLICATION OF DUKE</u>
	)	<u>ENERGY CAROLINAS, LLC and</u>
	)	<u>DUKE ENERGY PROGRESS,</u>
	)	<u>LLC FOR APPROVAL OF NET</u>
	)	<u>ENERGY METERING TARIFFS</u>

Pursuant to the North Carolina Utilities Commission’s (“Commission”) *Order Denying Joint Motion for an Evidentiary Hearing and Requiring the Filing of Proposed Order and Briefs*, entered on November 8, 2022 in the above-referenced docket, and the Orders Granting Extension of Time to File Proposed Orders and Briefs entered December 1 and December 7, 2022, Intervenors, Environmental Working Group (“EWG”), NC WARN, North Carolina Climate Solutions Coalition (“NCCSC”), Sunrise Movement Durham Hub (“Sunrise Durham”), 350 Triangle, 350 Charlotte, the North Carolina Alliance to Protect Our People and the Places We Live (“NC APPPL”), through undersigned counsel, and Donald E. Oulman, *pro se*, respectfully submit the following Joint Proposed Partial Order Regarding the Joint Application of Duke Energy Progress, LLC (“DEP”) and Duke Energy Carolinas, LLC’s (“DEC”) (collectively, “Duke”) for Approval of Net Energy Metering (“NEM”) Tariffs.

BY THE COMMISSION:

### HISTORY

Over time, the Commission has revised its net metering rules to “support recently adopted State policy and further promote the development of renewable energy in North Carolina”<sup>1</sup> and has sought to balance the potential for cross subsidies against the benefits of additional renewable electric generation in this State. As the Commission engaged this balancing process, it has repeatedly acknowledged that a determination of the costs and benefits of customer sited generation is not a simple task.

In 2005, the Commission first directed utilities in North Carolina to make NEM available to North Carolina customers.<sup>2</sup> As stated in the 2005 NEM Order, and reaffirmed in the Commission’s 2009 NEM Order, “net metering” generally refers to a billing arrangement whereby a customer that owns and operates an electric generating facility is billed according to the difference over a billing period between the amount of energy the customer consumes.<sup>3</sup>

In 2005, the Commission ordered that all net metering customers must be on a time of use (“TOU”) demand rate schedule and that the utility could not charge the customer-generator any standby, capacity, metering or other fees other than those approved for all customers. To offset the potential for cost shifts, the utility,

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<sup>1</sup> Order Amended Net Metering Policy, Docket No. E-100, Sub 83 (March 31, 2009) (the “2009 NEM Order”).

<sup>2</sup> Order Amending Net Metering Policy, Docket No. E-100, Sub 83 (Oct. 20, 2005) (the “2005 NEM Order”).

<sup>3</sup> In 2017, HB 589 codified the definition of “Net metering” as the use of “electrical metering equipment to measure the difference between the electrical energy supplied to a retail electric customer by an electric power supplier and the electrical energy supplies by the retail electric customer to the electric power supplier of the applicable billing period.” N.C. Gen. Stat. § 62-126.3(9).

however, would receive renewable energy certificates (“RECs”) associated with excess generation by customer-generators when generation credits were reset to zero at the beginning of each summer billing season.

When asked to reconsider its 2005 decision, the Commission noted at that time that costs and benefits were difficult to determine, stating:

[w]hile the magnitude of these costs are uncertain and cannot be reasonably predicted, the Commission remains convinced that its decisions appropriately allocates these costs and benefits among net metering customers, utilities and their remaining ratepayers.<sup>4</sup>

In 2008, the Commission was asked to consider whether to expand net metering to larger renewable generators up to 1 MW and to revisit the issue of whether a TOU rate schedule was required for a net metering customer. Witnesses testified regarding the benefits of customer-sited renewables including “environmental benefits, creat[ing] jobs, reduce[d] energy losses on the distribution and transmission systems, and provid[ing] sources of emergency power” as well as “energy independence; local job creation; reduced emissions; line loss reductions; improved voltage; diminished land use effects; lower right-of- way acquisition costs; reduced capacity, transmission and distribution costs; reduced congestion; and reduced vulnerability of the system to terrorism.”<sup>5</sup>

In considering the evidence in that matter, the Commission concluded that the utilities’ cost data “provide an incomplete picture of the costs and benefits afforded by additional . . . net-metered renewable generation.”<sup>6</sup> The data “focused

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<sup>4</sup> 2009 NEM Order, p. 2 (quoting July 6, 2006 Order on Reconsideration Modifying Net Metering Tariffs and Riders).

<sup>5</sup> *Id.* at 4-6.

<sup>6</sup> *Id.* at 11.

on lost revenues rather than actual costs and ignored many potential benefits.”<sup>7</sup> The Commission noted that renewable customer-owned generation “almost certainly provides some additional benefits” that should have been acknowledged in their analysis. Additionally, the Commission confirmed that “the presence of cross-subsidies alone is not dispositive, and the evidence [presented in the 2009 proceeding] and the clearly enunciated State policy favoring development of additional renewable generation support expanding net metering eligibility to renewable generation with capacity up to 1 MW.”<sup>8</sup>

In its 2009 Order, the Commission noted that “the requirement that customer-generators switch to **a TOU-demand rate is a deterrent and has actually inhibited the installation of renewable generation.**”<sup>9</sup> Accordingly, the Commission ordered that utilities offer customer-generators “the option of net metering **under any rate schedule available to customers in the same rate class** in order to further encourage the development of renewable generation”<sup>10</sup> and further ordered that net-metering customers may not be assessed any “standby, capacity, metering or other fees other than those approved for all customers on the same rate schedule.”<sup>11</sup>

In the interim, cost-benefit analyses have been at issue in various avoided cost proceedings. For example, in 2014, a cost-benefit analysis for both NEM solar and solar qualifying facilities was submitted for the Commission’s consideration by

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<sup>7</sup> *Id.*

<sup>8</sup> *Id.* at 11.

<sup>9</sup> *Id.* at 12.

<sup>10</sup> 2009 NEM Order, pp. 12-13 (emphasis added).

<sup>11</sup> *Id.* at 15.

the North Carolina Sustainable Energy Association in its biennial avoided cost proceeding.<sup>12</sup> In that proceeding, the Commission held that the utilities “shall not incorporate the costs and benefits related to solar integration in their avoided cost calculations until such time that future studies and developments have further clarified [and] have been concluded and the Commission has approved such inclusions.”<sup>13</sup> In 2021, the Commission directed Duke to address the costs and benefits of customer-sited generation consistent with N.C. Gen. Stat. § 62-126.4(b) as part of its Comprehensive Rate Design Study (the “Rate Design Study”).<sup>14</sup> Whether the Rate Design Study sufficiently considered such benefits is contested in this matter.

In the *Joint Application of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC for Approval of Net Energy Metering Tariffs in Compliance with G.S. § 62-126.4 and House Bill 951* (the “Joint Application”), Duke is requesting that this Commission again revisit net metering tariffs considering the legislative directives of HB 589 and HB 951 and reverse the Commission’s previous decisions. Specifically, Duke has requested the Commission approve a revised NEM tariff that 1) restricts NEM customer access to all other rate schedules and mandates a TOU-Critical Peak Pricing (“CPP”) rate; 2) imposes minimum monthly bills and non-bypassable charges for all NEM customers; 3) assesses monthly grid access fees for larger facilities (greater than 15 kW-dc); and 4) credits net exports monthly

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<sup>12</sup> Direct Testimony of R. T. Beach, Exhibit 2, Docket No. E-100, Sub 140 (April 25, 2014).

<sup>13</sup> Order Setting Avoided Cost Input Parameters, Docket No. E-100, Sub 140 at p. 66 (Dec. 31, 2014).

<sup>14</sup> See Order Accepting Stipulations, Granting Partial Rate Increase, and Requiring Customer Notice, Docket No. E-2, Sub 1219 at p. 179 (Apr. 16, 2021); see also Order Accepting Stipulations, Granting Partial Rate Increase, and Requiring Customer Notice, Docket No. E-7, Sub 1214 at p. 171 (Mar. 31, 2021).

at the avoided cost rate, rather than the current retail rate. Under the proposed tariff, all RECs for energy exports would be owned by the utility.

Duke and certain rooftop solar installer intervenors have also submitted, for Commission approval, a time and capacity limited proposed “Bridge Rate” as an alternative to the TOU-CPP rate proposed in the Joint Application. Duke contends that these proposed tariffs are in accord with HB 589 and HB 951. Multiple intervenors disagree and contend otherwise.

#### House Bill 589

On July 27, 2017, House Bill 589 (“HB 589”) was signed into law to reform the State’s approach to integration of renewable electricity generation.<sup>15</sup> HB 589 addressed several issues relating to renewable energy generation, including the Distributed Resources Access Act, which authorized and encouraged in the interest of public policy the leasing of solar energy facilities for retail customers and the subscription to shared solar energy facilities. To address solar leasing contracts, the act required the Commission to establish net metering both for electric customers who owned a renewable energy facility for their own primary use, and those who are customer generator lessees.<sup>16</sup> The law expressly requires that the rates “shall be nondiscriminatory” and set “only after an investigation of the costs and benefits of customer sited generation.”<sup>17</sup> Furthermore, the Commission shall establish net metering rates “under all tariff designs” and ensure that the net metering retail customer pays its “full fixed cost of service.”<sup>18</sup>

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<sup>15</sup> House Bill 589, Session Law 2017-192, enacted N.C. Gen. Stat. § 62-126.4.

<sup>16</sup> N.C. Gen. Stat. § 62-126.4(a).

<sup>17</sup> N.C. Gen. Stat. § 62-126.4(b).

<sup>18</sup> *Id.*

Additionally, the law provides that the “rates may include fixed monthly energy and demand charges.”<sup>19</sup>

The law does not include a deadline for new net metering rates but does provide that retail customers that own and install an on-site renewable energy facility and interconnect to the grid prior to the adoption of such rates may elect to continue net metering under the rate in effect at the time until January 1, 2027.<sup>20</sup>

### House Bill 951

In October 2021, through the adoption of House Bill 951 (“HB 951”), North Carolina lawmakers directed the Commission to “take all reasonable steps” to reduce carbon dioxide (“CO<sub>2</sub>”) emissions by 70% by the year 2030 and to achieve carbon neutrality by 2050.<sup>21</sup> Included among the directives was the revision of net metering rates. Although HB 951 includes a number of deadlines for the Commission, including the adoption of a Carbon Plan by December 31, 2022, the law did not impose any deadline for revision of net metering rates.

## DISCUSSION AND CONCLUSIONS

**ISSUE 1: Has the statutory requirement of HB 589 (N.C. Gen. Stat. § 62-126.4) to set rates after “an investigation of the costs and benefits of customer sited generation” been satisfied by Duke’s embedded and marginal cost study conducted as part of its Rate Design Study?**

### Comments of Parties

There is wide disagreement among the parties as to whether, and to what extent, there is cross-subsidization under existing NEM tariffs. Duke contends that there is a “potential embedded cost cross-subsidy per NEM bill in the range of \$25-

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<sup>19</sup> *Id.*

<sup>20</sup> *Id.* § 62-126.4(c).

<sup>21</sup> House Bill 951, Session Law 2021-165, Part I, Section I, enacted N.C. Gen. Stat. § 62-110.9.

\$30 in DEC and \$35-\$40 in DEP” and a “potential marginal cost cross-subsidy . . . in the range of \$30-\$35 in DEC and \$58-\$63 in DEP.”<sup>22</sup> Many intervenors dispute whether there is any cross-subsidization. In its Joint Application, Duke acknowledged that even the parties to the November 29, 2021 Memorandum of Understanding, filed contemporaneously with the Joint Application, do not agree that NEM customers are subsidized by non-NEM customers.<sup>23</sup>

There is widespread disagreement over whether Duke’s studies comply with the investigation of costs and benefits of customer sited generation required by HB 589. The Public Staff concedes that an independent value of solar study may provide additional insight into the benefits of solar generation. Public Staff states that Duke’s embedded and marginal cost studies capture “the majority, if not all, of the known and verifiable benefits of solar generation” but then provides a chart that shows that Duke’s studies do not capture a number of benefits including, avoided ancillary services, market price reduction, avoided renewable procurement costs, social environmental, security enhancement, or societal benefits such as economic job creation.<sup>24</sup>

The Attorney General’s Office (“AGO”) contends that Duke’s Rate Design Study does not satisfy the statutory mandate to investigate costs and benefits. The AGO notes that while Duke’s studies investigated the costs, “it did not analyze potential benefits . . . [which] are many—from reducing carbon emissions by

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<sup>22</sup> Joint Application of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC for Approval of Net Energy Metering Tariffs in Compliance with G.S. § 62-126.4 and House Bill 951, Docket No. E-100, Sub 180 at p. 8 (Mar. 29, 2022) (hereinafter, “Duke’s Joint Application”).

<sup>23</sup> Duke’s Joint Application, p. 8, n. 4.

<sup>24</sup> Initial Comments of the Public Staff, pp. 30-31.

offsetting fossil fuel generation to improving grid resilience—and they should be studied and quantified.”<sup>25</sup> Many intervenors expressed strong agreement with the AGO’s position, including, EWG, NC WARN, NCCSC, Sunrise Durham, 350 Triangle, 350 Charlotte, NC APPPL, Mr. Donald E. Oulman, Sundance Power Systems, Inc., Southern Energy Management, Inc., and Yes Solar Solutions.

*Applicable Standard of Care for Cost-Benefit Analyses and Recommended Value of Solar Study*

Several intervenors, including EWG, NC WARN, NCCSC, Sunrise Durham, 350 Triangle, 350 Charlotte, NC APPPL, and Mr. Donald E. Oulman assert that Duke’s studies are flawed because they failed to comply with the applicable standard of care governing cost-benefit analyses of distributed energy resources such as rooftop solar set by the National Energy Screening Project’s *National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources* (“NSPM-DER”). The NSPM-DER recommends a detailed analysis of benefits, including both customer and societal impacts, for every cost-benefit analysis of NEM solar, including at a minimum, an examination of low-income customer non-energy impacts, greenhouse gas emissions, incremental economic development and job impacts, health impacts, energy imports, and energy independence, among others. In consideration of the foregoing factors, these intervenors assert that a Value of Solar Study is needed.

Duke argues that it does not need to comply with the NSPM-DER or consider societal benefits because the standard has been applied in three (3) states and instead advocate for the use of the principles endorsed by the National

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<sup>25</sup> Comments of the Attorney General’s Office, p. 3.

Association of Regulatory Utility Commissioners (“NARUC”).<sup>26</sup> Intervenors point out that the NSPM-DER was promulgated in 2020 and since then has been relied upon throughout the nation. They further contend that the NARUC manuals cited by Duke are approximately thirty (30) years old, pre-date NEM solar, and do not provide guidance on the beneficial attributes that should be considered in analyzing the costs and benefits of rooftop solar. As of November 2022, the NSPM-DER standard has been adopted by eleven (11) public utility commissions and has been recommended for adoption before thirty-one (31) public utility commissions.

#### *Commission-Led Cost-Benefit Analysis*

In their initial comments, Sundance Power Systems, Inc., Southern Energy Management, Inc., and Yes Solar Solutions (collectively, the “NC Rooftop Solar Installers”) contend that the Legislature intended an independent study to be conducted by the Commission, not the utility, and that the Commission should not accept Duke’s Rate Design Study as the final word on what the cost is to serve net metering customers.<sup>27</sup> Even after entering into a Stipulation regarding a “Bridge Rate” until 2026 in an attempt to mitigate the devaluation of solar from the Joint Application, the NC Rooftop Solar Installers continue to urge the Commission to work in the longer term with all stakeholders to develop NEM rates that “fully reflect the value that customer-owned solar provides to Duke’s generation, transmission and distributions systems” and the value of solar to reaching carbon reduction goals of HB 951.<sup>28</sup>

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<sup>26</sup> Joint Reply Comments of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC, at pp. 8-9.

<sup>27</sup> Comments of the North Carolina Rooftop Solar Installers, pp. 2-3.

<sup>28</sup> Reply Comments of the North Carolina Rooftop Solar Installers, p. 2.

The NC Rooftop Solar Installers' contention that HB 589 requires the Commission to lead an independent cost-benefit analysis into customer-sited generation is supported by several intervenors, including EWG, NC WARN, NCCSC, Sunrise Durham, 350 Triangle, 350 Charlotte, NC APPPL, and Mr. Donald E. Oulman. These intervenors focus attention on the legislative intent and plain language of HB 589 and emphasize that it is common for state utility commissions to lead investigations into the costs and benefits of NEM solar. They argue that every aspect of N.C. Gen. Stat. § 126.4 requires that the Commission take the lead on the establishment of new NEM tariffs and point out the following: the title of the statute is "Commission to establish net metering rates";<sup>29</sup> subsections (a) and (c) state that Commission approval is required;<sup>30</sup> and subsection (b) states that "[t]he Commission shall establish net metering rates."<sup>31</sup> They point also to published remarks of Rep. John Szoka (R-Cumberland), chief author of HB 589, who stated that "[i]t's not up to the utility to determine whether net metering is good or bad."<sup>32</sup> These intervenors also highlight other provisions of the Public Utilities Act which empower the Commission with investigative authority.<sup>33</sup> In doing so, they discuss how under fundamental principles of statutory construction, statutory provisions must be consistently construed with other

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<sup>29</sup> See N.C. Gen. Stat. § 62-126.4.

<sup>30</sup> *Id.* § 62-126.4(a) and (c).

<sup>31</sup> *Id.* § 62-126.4(b).

<sup>32</sup> Elizabeth Ouzts, *Energy News Network*, "Energy Bill could see North Carolina join national fight over net metering," (July 17, 2017), <https://energynews.us/2017/07/17/energy-bill-could-see-north-carolina-join-national-fight-over-net-metering/> (last visited Dec. 15, 2022) (emphasis added).

<sup>33</sup> See N.C. Gen. Stat. § 62-34(a) ("[t]he Commission shall from time to time visit the places of business and investigate the books and papers of all public utilities"); see also N.C. Gen. Stat. § 62-37(a) ("the Commission may . . . investigate and examine the condition and management of public utilities or of any particular public utility").

provisions of the same statutory act; therefore, they argue the word “investigation,” as used in HB 589, must be interpreted in a manner that is consistent with the overall statute.

#### *Duke’s Cost-Shift Analysis*

As part of its Joint Application, Duke argues that there is a cost-shift from NEM residential customers to non-NEM residential customers. Several Intervenors contend that Duke’s cost-shift analysis contains numerous flaws and omissions, and that had Duke properly analyzed the known and verifiable benefits of solar, they would have concluded that NEM solar is a net benefit, with no negative cost-shift from NEM solar. For example, the North Carolina Sustainable Energy Association, the Southern Alliance for Clean Energy, and Vote Solar (collectively, “NCSEA *et al.*”) identified several benefits of distributed renewable generation that DEC and DEP did not quantify, including “avoided costs for carbon emissions and fuel hedging benefits.”<sup>34</sup>

Intervenors NC WARN, NCCSC, and Sunrise Durham (collectively, “NC WARN *et al.*”) contend that Duke’s analysis is flawed because of its emphasis on residential NEM customers to the exclusion of an examination of the cost-shifts caused by other customer classes. These intervenors argue that by solely analyzing this single category, the Joint Application fails to assess the alleged cost-shift between NEM customers as a whole (residential and non-residential), and non-NEM residential and non-residential customers.<sup>35</sup> These intervenors further argue that Duke’s analysis failed to consider that the installation of NEM solar can

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<sup>34</sup> Joint Initial Comments of NCSEA *et al.*, Exhibit A, p. 6, n. 7.

<sup>35</sup> Joint Initial Comments of NC WARN *et al.*, p. 28.

reduce or eliminate expansion of the transmission and distribution system that would otherwise be necessary to accommodate load growth and grid congestion at times of peak demand.<sup>36</sup> Other intervenors, including EWG, 350 Triangle, 350 Charlotte, NC APPPL, and Mr. Donald E. Oulman are in support of these contentions. In sum, there is agreement amongst several intervenors that Duke's analysis of the benefits of solar is materially flawed, and when appropriate corrections are made, the concerns over a cost-shift are discredited and a true cost-shift would exist in favor of non-NEM customers.

### **Conclusion**

House Bill 589 instructs the Commission to establish new NEM tariffs after a cost-benefit analysis is conducted regarding customer-sited generation. The Commission finds that the NEM portion of Duke's Rate Design Study evaluated costs but did not include any evidence of an investigation regarding relevant associated benefits. The Commission also finds that the evidence shows that NEM customers are a net benefit to the grid system, and when properly analyzed, Duke's embedded and marginal cost study is flawed and falls short of the generally recognized standard of care for the performance of cost-benefit analysis of distributed energy resources. The Commission further finds that there are numerous benefits of rooftop solar, and Duke has made analytical errors in their approach to the question of whether there is a cost-shift from NEM customers. Finally, the Commission finds that the statutory language of HB 589 requires an independent Commission-led cost-benefit analysis of customer-sited generation,

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<sup>36</sup> *Id.* at 29.

which includes a Value of Solar Study as recommended by the applicable standard of care—the NSPM-DER.

**ISSUE 2: Does the language of HB 589 (N.C. Gen. Stat. § 62-126.4(b)) requiring that the Commission “establish net metering rates under all tariff designs” require that Duke continue to provide a flat-rate NEM tariff?**

### Comments of Parties

Many intervenors call attention to the Joint Application’s proposal to shift all residential NEM customers onto a TOU rate with CPP, which they contend would effectively discontinue service under a flat-rate tariff and eventually eliminate all current flat-rate NEM customers. These intervenors argue the elimination of an entire class of customers violates HB 589 and emphasize the statutory directive regarding tariff designs, which states in pertinent part 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>37</sup>

Intervenors, including NC WARN, EWG, NCCSC, Sunrise Durham, 350 Triangle, 350 Charlotte, NC APPPL, and Mr. Donald E. Oulman, contend that Duke’s proposal would hinder a customer’s ability to select a rider that is most appropriate for their needs and is disadvantageous to rooftop solar customers because TOU and CPP tariffs would reduce the value of their solar systems.

In response, Duke argues that the language of N.C. Gen. Stat. § 62-126.4 “ensures that each tariff established by the Commission pursuant to H.B. 589 achieves the primary goal of NEM reform thereunder—reducing the cross-subsidy

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<sup>37</sup> N.C. Gen. Stat. § 62-126.4(b) (emphasis added).

by ensuring each customer ‘pays its full costs of service.’”<sup>38</sup> In evaluating Duke’s contention, the above-mentioned intervenors argue that under fundamental principles of statutory construction, a statute should be evaluated as a whole and an individual section should not be construed in a manner that renders another provision of the same statute meaningless. Following these basic rules of statutory construction, these intervenors contend that Duke’s interpretation of HB 589 gives no meaning to the General Assembly’s intentional placement of the words “under all tariff designs” and instead narrows the provision down to the terms “pays its full fixed cost of service.” These intervenors argue that the Commission should give meaning to every word of HB 589, including the requirement that the “Commission shall establish net metering rates under all tariff designs.” They further point out that under Duke’s proffered interpretation, if the General Assembly required that customers pay their full fixed cost of service for any NEM rate adopted pursuant to HB 589, then the Commission could comply with the statutory mandate by taking no action at all.

*The Agreement and Stipulation of Settlement and Proposed Bridge Rate*

On May 19, 2022, Duke and the NC Rooftop Solar Installers proposed a non-binding Agreement and Stipulation of Settlement (“Stipulation”), including an alternative “Bridge Rate” for flat-rate NEM customers which does not include a TOU-CPP rate. Several intervenors, including EWG, NC WARN, NCCSC, Sunrise Durham, 350 Triangle, 350 Charlotte, NC APPPL, and Mr. Donald E. Oulman highlight that the proposed Bridge Rate involves a 4-year eligibility period and

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<sup>38</sup> Joint Reply Comments of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC, at p. 35.

imposes annual participation caps. These intervenors also note that following the approval of the Smart Saver Solar incentive program, the Bridge Rate would essentially terminate. They argue that the Bridge Rate is temporary and conditional and does not overcome Duke's failure to propose a flat-rate tariff comparable to the proposed 10-year TOU-CPP NEM tariffs in the Joint Application.

### **Conclusion**

The Commission finds that under a plain reading of HB 589 (N.C. Gen. Stat. § 62-126), the statute unambiguously mandates that a NEM rate be established for all tariff designs and as such, a flat rate NEM tariff must continue to be provided in order to provide flexibility across all customer classes. The Commission concludes that Duke's recommended interpretation of HB 589 alters the General Assembly's mandate and legislative intent. If the General Assembly intended HB 589 to require all NEM customers to pay their full fixed cost of service under a single tariff, they could have accomplished this purpose without including the words "under all tariff designs." The Commission also finds that the Bridge Rate proposed in the May 19, 2022 "Stipulation" between Duke and the NC Rooftop Solar Installers is not a means of complying with the statutory requirement of HB 589 that the Commission set net metering rates under all tariff designs.

**ISSUE 3: Do the proposed NEM tariffs violate the prohibition of unjust, unreasonable, and discriminatory rates under PURPA and HB 589 (N.C. Gen. Stat. § 62-126.4)?**

#### Current Law and Practice

Long-standing North Carolina law mandates that electric rates be "just and reasonable . . . without unjust discrimination, undue preferences or advantages, or

unfair or destructive competitive practices and consistent with “long term management and conservation of energy resources by avoiding wasteful, uneconomic and inefficient uses of energy.”<sup>39</sup> Furthermore, rates must be fixed in a manner that results in the “least cost mix of generation and demand-reduction measures which is achievable.”<sup>40</sup> Importantly, every rate must be “just and reasonable,”<sup>41</sup> and the burden is on the utility to prove that any changed rate is also “just and reasonable.”<sup>42</sup>

House Bill 589 further requires that NEM “rates shall be nondiscriminatory and established only after an investigation of the costs and benefits of customer-sited generation.”<sup>43</sup> Similarly, under the Public Utility Regulatory Policies Act of 1978 (“PURPA”), a charge upon a Qualifying Facility (“QF”) (i.e., an on-site solar generator up to 1 MW)<sup>44</sup> violates PURPA if it “discriminate[s] against any qualifying facility in comparison to rates for sales to other customers served by the electric utility.”<sup>45</sup> Charges upon solar QFs further violate PURPA if the charge is not “just and reasonable and in the public interest.”<sup>46</sup>

The Federal Energy Regulatory Commission (“FERC”) has ruled that since QFs are “likely to have the same characteristics as the load of other non-generating customers of the utility,” QFs should be subject to the same rates as

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<sup>39</sup> N.C. Gen. Stat. § 62-2(a)(4).

<sup>40</sup> *Id.* § 62-2(a)(3a).

<sup>41</sup> N.C. Gen. Stat. § 62-131(a).

<sup>42</sup> N.C. Gen. Stat. § 62-134(c).

<sup>43</sup> N.C. Gen. Stat. § 62-126.4(b).

<sup>44</sup> 18 C.F.R. § 292.203(d).

<sup>45</sup> *Id.* § 292.305(a)(1)(ii).

<sup>46</sup> *Id.* § 292.305(a)(1)(i).

non-QFs.<sup>47</sup> FERC has set forth a criterion for analyzing whether rates applicable to a QF meet the standard of being just, reasonable, and nondiscriminatory. A utility may only charge a different rate to QFs 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>48</sup> If the utility cannot demonstrate such data, the rate for sales to QFs “shall be the rate that would be charged to the class to which the qualifying facility would be assigned if it did not have its own generation.”<sup>49</sup> If these PURPA principles and regulatory requirements are not satisfied, interested persons may petition FERC and exercise other legal remedies for redress of NEM tariffs that discriminate against customer sited solar generators.

### Comments of Parties

#### *The Joint Application’s Treatment of Residential NEM Customers*

Several intervenors focus attention on the Joint Application’s proposed mandates that NEM customers take service under TOU-CPP rates, pay a minimum bill for service that non-generators in the same class do not have to pay, pay a grid access fee that would impose charges even if the NEM facility did not operate, and pay non-bypassable charges on the electric bill even if offset by generation credits. These intervenors further note that the proposed revisions to the NEM tariffs in Duke’s Joint Application impose new conditions and restrictions

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<sup>47</sup> Joint Explanatory of the Committee of Conference, P.L. 78-617, reprinted in *FERC Statutes and Regulations* ¶ 5151, at p. 5105-06; 45 Fed. Reg. 12214, 12228 (Feb. 25, 1980) (“FERC Order No. 69”).

<sup>48</sup> FERC Order No. 69.

<sup>49</sup> FERC Order No. 69.

that apply only to residential NEM customers and not to non-residential on-site generating customers. For example, the EWG highlights that that these conditions and restrictions include eliminating the existing tariff to new residential customers after January 1, 2023; barring residential customers from selecting a flat rate; mandating that all residential NEM customers receive service under TOU-CPP rates; and crediting excess energy delivered to the grid at an avoided cost rate. Other intervenors, such as NC WARN, NCCSC, Sunrise Durham, 350 Triangle, 350 Charlotte, NC APPPL, and Mr. Donald E. Oulman agree and emphasize that the preceding revised terms do not apply to non-residential on-site generating customers. Additionally, these intervenors call attention to how the current NEM tariffs are available to customers who generate on-site energy, whether from the sun, wind, micro-hydro, or biomass fuel. However, the mandatory TOU-CPP rate under the proposed revised tariffs would apply only to residential generators, most of which rely on solar-powered energy generation, thereby not impacting energy generation by any other source other than solar.

In evaluating the Joint Application, several intervenors contend that Duke's disparate treatment of NEM customers is prejudicial and unsupported by the evidence in this docket because there is neither accurate data nor consistent system-wide costing principles that can justify Duke's proposed revised NEM tariffs that treat generating residential customers differently from non-generating customers. For example, these intervenors argue that Duke's approach to the cost to serve customers with onsite generation is not connected to any analyses of specific costs to serve such NEM customers. Instead, Duke relies on averaged

data from a diverse pool of customer-generators. These intervenors further argue that the charges proposed by Duke are discriminatory because they were not formulated by the use of cost causation principles—a material, data-based connection between costs created by the customer and the rates aimed at recovering those costs—and are not based on an accurate cost of service study comparing the costs to serve NEM and non-NEM customers.

Finally, most intervenors argue that Duke’s proposed rates are vague and unduly complex compared to traditional NEM, which would negatively impact the distributed generation industry and make it difficult for prospective and current customers to project their potential savings from rooftop solar. For example, the NC Rooftop Solar Installers explain that “[u]nder the current net metering system . . . [rooftop solar installer] companies need 24 energy data points to model solar effectively (12 months of energy usage data and 12 months of projected solar production).<sup>50</sup> Under Duke’s proposed tariffs, the NC Rooftop Solar Installers state that “those 24 data points would increase to 17,520; with hourly data required for both solar (8,760 hours) and usage data (another 8,760 hours)” in addition to not factoring in CPP rates, which these intervenors classify as “unknowable.”<sup>51</sup> Furthermore, intervenor Donald E. Oulman argues, and several other parties agree, that elements of the proposed NEM tariffs would have an unjust and unreasonable impact on legacy customers by impairing the value proposition under which such customers decided to invest in rooftop solar.

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<sup>50</sup> Comments of the North Carolina Rooftop Solar Installers, p. 5.

<sup>51</sup> *Id.* at 5-6.

## Conclusion

The Commission finds that current NEM rates are nondiscriminatory to residential and non-residential energy-generating customers, and as to solar and non-solar generation, and support on-site generation of clean energy in furtherance of North Carolina public policy goals. Second, the Commission concludes that just and reasonable rates for NEM require accurate accounting for utility costs and a distinction between cost causation and the potential for cost-shifting. Finally, the Commission finds that Duke's approach to the Joint Application's proposed rates is not connected to any reliable analysis of the specific costs to serve NEM customers and instead relies on averaged data from diverse customer generators.

### **ISSUE 4: Does the Memorandum of Understanding or Stipulation entered into by Duke and certain intervenors compel adoption of the proposed NEM tariffs or the alternate proposed Bridge Rate by this Commission?**

#### 2021 Memorandum of Understanding

On November 29, 2021, Duke and certain parties to this proceeding, including NCSEA *et al.*, Sunrun, Inc., and the Solar Energy Industries Association, entered into a Memorandum of Understanding ("MOU") setting forth certain non-binding understandings and binding agreements. The MOU was filed simultaneously with Duke's Joint Application and proposes two main components—a resolution for new NEM tariffs for residential customer-generators and a resolution for energy efficiency incentives for residential customer-generators. As outlined in the Joint Application, after going "through a similar stakeholder process in South Carolina" and reaching "an agreement with leading

members of the solar and environmental communities on a path forward for NEM in South Carolina,”<sup>52</sup> after a stakeholder process in North Carolina, “the Companies were able to continue discussions with certain parties and ultimately reach an agreement on the proposed program, rate design structure, and the rates designed expressly for North Carolina. Thereafter, the parties memorialized the terms of the agreement in the [MOU] filed simultaneously [with the Joint Application] . . . .”<sup>53</sup>

### 2022 Stipulation

On May 19, 2022, Duke and the NC Rooftop Solar Installers filed a Stipulation which proposes for Commission approval an alternative and temporary NEM rate design, or “Bridge Rate,” for flat-rate NEM customers which does not include a TOU-CPP rate. Subject to Commission approval, the proposed Bridge Rate “would be available to all residential customers (regardless of their current rate schedule) who apply for NEM on or after January 1, 2023, until December 31, 2026, (subject to the early termination of the Proposed Bridge Rate . . . ), subject to the applicable caps for each calendar year . . . .”<sup>54</sup> Additionally, the Stipulation provides that “[c]urrent NEM customers may remain on their current rate until Jan 1, 2027 at which point they will transition to the Proposed Bridge Rate or may choose to move to the NEM-TOU rate in effect at that time. Customers may remain on the Proposed Bridge Rate for 15 calendar years after the date on which the customer submitted an interconnection application (the “Bridge Rate Period”), less the number of years they were on an alternative NEM rate structure prior to Jan 1,

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<sup>52</sup> Duke’s Joint Application, p. 11.

<sup>53</sup> Duke’s Joint Application, p. 12.

<sup>54</sup> Stipulation, ¶ 7.

2027. After that, the customer will move to the NEM-TOU rate in effect at the end of the Bridge Rate Period.”<sup>55</sup>

### Comments of Parties

Duke states that both the MOU and Stipulation were the result of broad support from stakeholders and “reflects the continued efforts by the Companies to engage stakeholders and build consensus for the Companies’ efforts to comply with H.B. 589.”<sup>56</sup> The Public Staff does not object to the Stipulation, and NCSEA *et al.* and the Solar Energy Industries Association are in support of it.”<sup>57</sup>

Several intervenors, including NC WARN, EWG, NCCSC, Sunrise Durham, 350 Triangle, 350 Charlotte, NC APPPL, and Mr. Donald E. Oulman emphasize that neither of these agreements is unanimous since numerous intervenors in the present docket were not signatories nor would they agree to the MOU or Stipulation. Intervenors also noted during the comment period of this proceeding that they were not afforded a meaningful opportunity to study or conduct discovery concerning the effects of the non-binding Stipulation given that it was filed and served on May 19, 2022, and the deadline for filing responsive comments was May 27, 2022.<sup>58</sup> These intervenors point to *State ex rel. Utilities Commission v. Carolina Utility Customers Association, Inc.*, where the North Carolina Supreme Court, in the context of a general rate case, emphasized the skepticism that the Commission must exercise when considering a nonunanimous settlement agreement.<sup>59</sup>

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<sup>55</sup> Stipulation, ¶ 8.

<sup>56</sup> Duke’s Joint Application, p. 12; see also Stipulation, p. 5.

<sup>57</sup> The Public Staff’s Letter In Lieu of Further Responsive Comments, p. 1; Joint Responsive Comments of NCSEA et al., p. 1.

<sup>58</sup> Joint Surreply Comments of NC WARN et al., pp. 28-29.

<sup>59</sup> 348 N.C. 452, 462-67, 500 S.E.2d 693, 701-03 (1998).

Intervenors argue that because Duke has not met their evidentiary burden in this proceeding, the proposed NEM tariffs and the Stipulation must be rejected since notwithstanding the MOU or Stipulation, the Commission must “set[] forth its reasoning and make[] ‘its own independent conclusion’ supported by substantial evidence on the record that the proposal is just and reasonable to all parties in light of all the evidence presented.”<sup>60</sup>

### Conclusion

The Commission finds that the MOU and Stipulation are non-binding and do not compel adoption of the proposed NEM tariffs or Bridge Rate as requested by Duke in the Joint Application.

#### **ISSUE 5: Does the language of HB 589 (N.C. Gen. Stat. § 62-126.4) impose a deadline for adoption of new NEM tariffs that preclude completing an Independent Value of Solar Study?**

##### Comments of Parties

The Joint Application requests a new NEM tariff by January 1, 2023.<sup>61</sup> The EWG asserts, and several other intervenors agree, that the General Assembly in 2017, through adoption of N.C. Gen. Stat. § 62-126.4(c), assured legacy NEM customers that they would have at least ten (10) years before any change in rates would apply.<sup>62</sup> These intervenors point out that HB 589 provides no deadline for the implementation of new NEM tariffs, and the only date in the statute provides that retail customers may “continue net metering under the net metering rate in effect at the time of interconnection until January 1, 2027.”<sup>63</sup>

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<sup>60</sup> *Id.* at 466, 500 S.E.2d at 703.

<sup>61</sup> Duke’s Joint Application, pp. 1-2.

<sup>62</sup> Surreply Comments of EWG, p. 13.

<sup>63</sup> N.C. Gen. Stat. § 62-126.4(c).

NCSEA *et al.* supports Commission approval of the NEM tariffs by the timeline proposed by Duke because the current residential rooftop solar rebate program authorized under HB 589 concludes at the end of 2022.<sup>64</sup> In response, other intervenors argue that the expiration of the solar rebate program is immaterial to the performance of a meaningful investigation of the costs and benefits of rooftop solar within the timeframe provided by HB 589 because it operates under a highly competitive lottery system, and the vast majority of rooftop solar customers will not receive the rebate.

### **Conclusion**

The Commission finds that HB 589 provides the Commission with a transition period until at least January 1, 2027 to revise NEM tariffs. The Commission also finds that HB 589 does not preclude existing NEM customers from remaining on their current tariff beyond January 1, 2027. Additionally, in recognition of the timeframe set forth in HB 589, the Commission has sufficient time to commission the statutorily mandated independent third-party investigation prior to revising the NEM tariffs currently in place.

Therefore, the Commission concludes that the required investigation of costs and benefits of customer sited generation shall be conducted by an independent third party commissioned by the Commission in accordance with HB 589's mandate prior to proceeding to establish revised NEM rates.

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<sup>64</sup> Joint Reply Comments of NCSEA et al., p. 2.

IT IS THEREFORE, ORDERED, as follows:

1. That Duke's Joint Application for Approval of Net Energy Metering Tariffs filed in this docket on November 29, 2021 is denied.
2. The Commission finds that NEM customers have a statutory right under HB 589 (N.C. Gen. Stat. § 62-126.4) to retain their current NEM tariff until January 1, 2027.
3. The Commission will open a separate docket and enter a scheduling order seeking comments on the procedure for a Commission-led cost-benefit analysis on the NEM solar, including a Value of Solar Study.
4. That upon completion of the Commission-led independent cost-benefit analysis and Value of Solar Study, Duke shall file a new application for revised NEM tariffs for all tariff designs which accurately incorporate the findings of the Commission-led studies and include a provision that legacy customers be grandfathered for the life of their systems.

ISSUED BY ORDER OF THE COMMISSION.

This the \_\_\_ day of \_\_\_\_\_, 202\_\_.

NORTH CAROLINA UTILITIES COMMISSION

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A. Shonta Dunston, Chief Clerk

**CERTIFICATE OF SERVICE**

I hereby certify that I have on this day served a copy of the foregoing *Joint Proposed Partial Order Regarding the Joint Application of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC for Approval of Net Energy Metering Tariffs* 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 16th day of December, 2022.

LAW OFFICES OF F. BRYAN BRICE, JR.

By: /s/ Andrea C. Bonvecchio  
Andrea C. Bonvecchio