

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-100, SUB 180

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of:)	<u>JOINT INITIAL COMMENTS</u>
Investigation of Proposed Net Metering)	<u>OF NC WARN, NCCSC AND</u>
Policy Changes)	<u>SUNRISE DURHAM</u>

Pursuant to the North Carolina Utilities Commission's ("NCUC" or "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 NC WARN, North Carolina Climate Solutions Coalition ("NCCSC"), and Sunrise Movement Durham Hub ("Sunrise Durham"),¹ through undersigned counsel, hereby submit the following Joint Initial Comments:

SUMMARY

For numerous reasons which will be set forth herein, the Commission should reject the net energy metering ("NEM") tariffs proposed by Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP") (collectively, the "Companies") in the above-referenced docket. The NEM tariffs proposed by the Companies (the "tariffs") violate applicable law, including N.C. Gen. Stat. § 62-126.4(b), and are not supported by any evidentiary basis. Instead, the proposed

¹ Contemporaneous with the present Initial Comments, Sunrise Durham filed a Petition to Intervene in the above-referenced docket. That petition is currently pending before the Commission.

tariffs are the result of a Memorandum of Understanding (“MOU”) between the Companies and certain intervenors, yet substantial portions of that MOU—namely the Smart Saver incentives portions at issue in separate dockets—have been rejected in South Carolina and are in danger of rejection in this State. Without the Smart Saver portion of the MOU, there is even less basis for the tariffs proposed in the present docket.

NC WARN, NCCSC and Sunrise Durham retained William E. Powers (“Mr. Powers”), an engineer with over thirty-five (35) years of experience in the solar industry, to evaluate the proposed tariffs. Mr. Powers’ *Report Responding to Deficiencies in the Duke Energy NEM Application* (the “Report”) is attached hereto as **Attachment A**. Based upon a review of the applicable law and Mr. Powers’ Report, NC WARN, NCCSC and Sunrise Durham urge the Commission to reject the Companies’ proposed NEM tariffs for at least the following reasons:

- Pursuant to House Bill 589, “The Commission shall establish net metering rates under all tariff designs” N.C. Gen. Stat. § 62-126.4(b) (emphasis added). The Companies, however, failed to propose NEM rates “under all tariff designs.” Instead, the Companies seek to require all NEM customers—even existing flat-rate NEM customers—to operate under time of use (“TOU”) tariffs with critical peak pricing (“CPP”) windows that are extremely disadvantageous to rooftop solar. By failing to propose tariffs “under all tariff designs,” such as for flat-rate customers, the Companies’ proposed NEM tariffs violate the mandate and intent of House Bill 589.

- Moreover, House Bill 589 required that the NEM “rates shall be . . . established only after an investigation of the costs and benefits of customer-sited generation.” N.C. Gen. Stat. § 62-126.4(b). No such “investigation” has been conducted. Instead, the Companies purported to support the proposed tariffs with old Cost-of-Service Studies using outdated 2018 data. In addition to being outdated, the Companies’ Cost-of-Service Studies concentrate upon the **costs** of rooftop solar but fail to examine in any meaningful way the **benefits**, both societal and otherwise, of rooftop solar. In no respect has there been, as required by House Bill 589, an “investigation of the costs and benefits of customer-sited generation.” In furtherance of this statutory mandate, the Commission must lead a Value of Solar Study and establish NEM tariffs based upon the results of that Commission-led study.

- The Companies’ proposed tariffs would disincentivize the installation of rooftop solar. Among other reasons, the Companies’ own responses to data requests acknowledge that the proposed tariffs would reduce the economic value of rooftop solar for NEM customers by about thirty percent (30%). This catastrophic disincentive of rooftop solar violates the purpose and goals of both House Bill 951 and Governor Cooper’s Executive Order 80.

- The Companies’ tariffs would impose extravagant Minimum Monthly Bills upon NEM customers. Despite the onerous nature of the Minimum Monthly Bills, the Companies have failed to establish any cost-shift which could feasibly justify these Minimum Monthly Bills. Among other flaws with their cost-shift analysis, the Companies failed to account for the elimination of transmission and

distribution investments which would result from the proliferation of rooftop solar. Because there is no basis for a supposed cost-shift, the Minimum Monthly Bills should be rejected.

- The Companies' tariffs would require NEM customers to sign up for TOU tariffs with CPP windows. The on-peak windows are not, however, based upon the Companies' historical summer peak. Instead, these windows are based upon the Companies' projection of where summer peak might be in 2026. However, the Companies have not provided any evidentiary basis for this projected shift in summer peak. Yet, the summer on-peak TOU window would cause NEM customers to pay the highest rate exactly when the sun is going down and solar systems are not generating power. Simply put, the Companies' TOU and CPP proposal is both unsupported by the evidence and uniquely detrimental to rooftop solar.

- Finally, the Companies' proposed tariffs omit several important provisions. For instance, battery storage is a fast-growing technology which is inexplicably absent from the proposed NEM tariffs. In rejecting the proposed tariffs, the Commission should order the Companies to propose new tariffs which, among other things, address NEM customers with battery storage.

For all of these reasons, among others, the Commission should reject the Companies' proposed NEM tariffs. As required by N.C. Gen. Stat. § 62-126.4(b), the Commission should lead a Value of Solar Study and, based on the results of that study, require revised NEM tariffs for all tariff designs which accurately reflect not only the costs, but also the benefits, of rooftop solar.

INDEX OF ATTACHMENTS

The following is a list of the attachments filed contemporaneously with these Initial Comments.² These attachments are cited in both the present Initial Comments and Mr. Powers' Report.

<u>Attachment A:</u>	Report Responding to Deficiencies in the Duke Energy NEM Application, by Mr. Powers;
<u>Attachment B:</u>	Deployment of NEM Solar Allows Duke Energy to Eliminate New Transmission That Would Otherwise Be Built, an Analysis by Mr. Powers;
<u>Attachment C:</u>	Substitution of Residential NEM Solar for New Transmission Built to Serve Remote, Utility-Scale Solar in North Carolina Could Add \$1,600/yr in Avoided Transmission Value to these NEM Systems, an Analysis by Mr. Powers;
<u>Attachment D:</u>	Duke Energy Carolinas Time-of-Use and Seasonal Pricing Study (2018);
<u>Attachment E:</u>	The Companies' Response to the Public Staff's Data Request No. 1-3(f);
<u>Attachment F:</u>	The Companies' Response to NC WARN's Data Request No. 2-1;
<u>Attachment G:</u>	The Companies' Response to the Public Staff's Data Request No. 1-1;

² In response to several data requests, the Companies produced voluminous spreadsheets in native Excel format. In certain instances, those spreadsheets included intact formulas to allow the parties to make calculations. As a result, it was not possible to convert several of these Excel spreadsheets into Adobe PDF format for filing purposes. Specifically, undersigned counsel has omitted the Excel spreadsheets from the following discovery responses: **Attachment E**, the Companies' Response to the Public Staff's Data Request No. 1-3(f); **Attachment G**, the Companies' Response to the Public Staff's Data Request No. 1-1; **Attachment H**, the Companies' Response to NC WARN's Data Request No. 1-11; and **Attachment N**, the Companies' Response to the Public Staff's Data Request 1-2. Upon request, undersigned counsel will provide the native Excel spreadsheets referenced herein to Commission staff or the parties.

<u>Attachment H:</u>	The Companies' Response to NC WARN's Data Request No. 1-11;
<u>Attachment I:</u>	The Companies' Response to NC WARN's Data Request No. 5-1;
<u>Attachment J:</u>	The Companies' Response to NC WARN's Data Request No. 4-4;
<u>Attachment K:</u>	The Companies' Response to NC WARN's Data Request Nos. 1-5 & 1-10;
<u>Attachment L:</u>	The Companies' Response to NC WARN's Data Request Nos. 1-4 & 1-9;
<u>Attachment M:</u>	The Companies' Response to NC WARN's Data Request Nos. 4-1 & 4-2;
<u>Attachment N:</u>	The Companies' Response to the Public Staff's Data Request No. 1-2;
<u>Attachment O:</u>	The Companies' Response to NC WARN's Data Request No. 1-16;
<u>Attachment P:</u>	The Companies' Response to the Public Staff's Data Request No. 1-28;
<u>Attachment Q:</u>	The Companies' Response to NC WARN's Data Request No. 2-4; and
<u>Attachment R:</u>	The Companies' Response to NC WARN's Data Request Nos. 1-3 & 1-8.

DISCUSSION

The following constitutes a discussion of the legal and evidentiary deficiencies with the Companies' proposed NEM tariffs. Large portions of this discussion constitute summaries of Mr. Powers' Report, which Report should be consulted for additional details and supporting citations.

I. **The Companies' Proposed NEM Tariffs Violate the Mandate of House Bill 589 that the Commission "Establish Net Metering Rates Under All Tariff Designs."**

On July 27, 2017, North Carolina Governor Roy Cooper signed into law *An Act to Reform North Carolina's Approach to Integration of Renewable Electricity Generation through Amendment of Laws Related to Energy Policy and to Enact the Distributed Resources Access Act*, commonly referred to as "House Bill 589." Among other things, House Bill 589 requires the following of the Commission regarding NEM:

The rates shall be **nondiscriminatory** and established only after an investigation of the costs and benefits of customer-sited generation. **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.

N.C. Gen. Stat. § 62-126.44(b) (emphasis added). Of particular importance for the present discussion, House Bill 589 required that the Commission establish a NEM rate for "all tariff designs." *Id.*

Presently, there are a myriad of NEM arrangements which provide customers the flexibility to select the riders which are most appropriate for the customer's needs. By way of example, there are presently NEM customers under flat-rate riders. These flat-rate NEM customers pay the same rate for electricity irrespective of the time of day that the electricity is purchased from the grid. Alternatively, there are NEM customers under TOU-based tariffs.³

³ For example, the Companies' Joint Application discusses DEP's existing flat-rate tariff for NEM customers and DEP's TOU tariff for NEM customers. See Joint Application of DEC & DEP for Approval of NEM Tariffs, NCUC Docket No. E-100, Sub 180, Ex. No. 2, pdf p. 34. Notably, DEP proposes in the present docket

Unfortunately, the Companies have proposed a “one size fits all” NEM tariff. The Residential Solar Choice rider proposed by DEC in the above-referenced docket states: “Customers receiving service under this Rider **must be served** under a residential rate schedule with time of use (TOU) and critical peak pricing (CPP), specifically Schedule RSTC or RETC.”⁴ Similarly, the Residential Solar Choice rider proposed by DEP in the above-referenced docket states: “Customers receiving service under this Rider **must be served** under a residential rate schedule with time of use (TOU) and critical peak pricing (CPP), specifically proposed Schedule R-TOU-CPP.”⁵

The Companies’ Joint Application is not explicit on this point, but a review of the Companies’ proposed NEM tariffs inexorably leads to the following conclusion: The Companies seek to compel all NEM customers in the State of North Carolina onto a tariff involving TOU and CPP.

In other words, the Companies would seek to eliminate an entire class of tariffs—namely, flat-rate NEM customers. This proposal violates the mandate of House Bill 589, which states: “The Commission shall establish net metering rates **under all tariff designs**” N.C. Gen. Stat. § 62-126.4(b) (emphasis added).

This violation of House Bill 589 is not a mere technicality. To the contrary, the Companies seek to force all NEM customers onto TOU and CPP tariffs which are extremely disadvantageous to rooftop solar. As discussed in more detail below,

that this arrangement be “closed to new residential participants on and after January 1, 2023.” *Id.* at pdf p. 33.

⁴ Joint Application of DEC & DEP for Approval of NEM Tariffs, NCUC Docket No. E-100, Sub 180, Ex. No. 1, pdf p. 30 (emphasis added).

⁵ *Id.*, Ex. No. 2, pdf p. 41 (emphasis added).

the Companies propose an on-peak window during the summer of 6 pm to 9 pm. That window corresponds to when the sun is setting and therefore rooftop solar systems are generating hardly any power. Hence, the Companies would propose that NEM customers be forced onto TOU and CPP tariffs which will substantially reduce the value of their solar systems by forcing NEM customers to purchase power from the grid at the highest rate.⁶ This “one size fits all” approach is not only inequitable and unfair, it also violates House Bill 589.

II. **The Companies’ Proposed NEM Tariffs Violate the Mandate of House Bill 589 That NEM Rates Be “Established Only After an Investigation of the Costs and Benefits of Customer-Sited Generation.”**

A. **House Bill 589 Requires a Commission-led Cost-Benefit Analysis.**

House Bill 589 prohibits the establishment of new NEM tariffs until after a Commission-led cost-benefit analysis is conducted regarding customer-sited generation. The applicable statute states:

§ 62-126.4. Commission to establish net metering rates.

. . . .

(b) **The rates shall be nondiscriminatory and established only after an investigation of the costs and benefits of customer-sited generation.** 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. . . .

⁶ **Attachment A**, Powers’ Report, pp. 15-18.

N.C. Gen. Stat. § 62-126.4(b) (second emphasis added). Self-evidently, it is mandatory that “an investigation of the costs and benefits of customer-sited generation” be conducted.

Equally important is who should lead the cost-benefit analysis. Every aspect of this statute requires that the Commission take lead on the establishment of new NEM tariffs. For instance, the title of the statute is, “Commission to establish net metering rates.”⁷ Subsection (a) of the statute states that “Commission approval” is required.⁸ Subsection (b), quoted above, states that “[t]he Commission shall establish net metering rates.”⁹ In other words, the Commission is the prime mover regarding the establishment of new NEM tariffs, and the Commission should therefore lead the mandatory cost-benefit analysis. In fact, it is common for state utility commissions to lead investigations into the costs and benefits of NEM solar.¹⁰

Principles of statutory construction likewise require the conclusion that the “investigation of the costs and benefits of customer-sited generation”¹¹ be led by the Commission. For instance, “it is a fundamental principle of statutory interpretation that courts should evaluate a statute as a whole and . . . not construe an individual section in a manner that renders another provision of the same

⁷ N.C. Gen. Stat. § 62-126.4 (emphasis added).

⁸ *Id.* § 62-126.4(a) (emphasis added).

⁹ *Id.* § 62-126.4(b) (emphasis added).

¹⁰ **Attachment A**, Powers’ Report, p. 23; see also CPUC, *California Net Energy Metering Ratepayer Impacts Evaluation*, prepared by Energy+Environmental Economics (E3), October 2013; CPUC, *Net-Energy Metering 2.0 Lookback Study*, prepared by Verdant Associates, LLC, January 21, 2021.

¹¹ N.C. Gen. Stat. § 62-126.4(b).

statute meaningless.”¹² Reading the statute as a whole, as we must, this “investigation,” like all the other above-quoted aspects of N.C. Gen. Stat. § 62-126.4, should be conducted by the **Commission**. To conclude otherwise would be to interpret the word “investigation” in a manner which is inconsistent with the overall statute.

Another crucial tool of statutory construction involves ascertaining **legislative intent**: “The foremost task in statutory interpretation is to determine legislative intent while giving the language of the statute its natural and ordinary meaning unless the context requires otherwise.”¹³ Here, the evidence shows that legislators intended for the Commission to lead the cost-benefit analysis. For instance, in an article appearing in *Energy News Network*, Rep. John Szoka (R-Cumberland), who was the chief author of House Bill 589, stated the following:

Szoka is adamant the Commission will conduct the cost-benefit study.

“It’s not up to the utility to determine whether net metering is good or bad,” he said. “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.”¹⁴

Clearly, therefore, the intent behind House Bill 589 is for the Commission, not the Companies, to lead the statutorily mandated “investigation of the costs and

¹² *Lunsford v. Mils*, 367 N.C. 618, 628, 766 S.E.2d 297, 304 (2014) (internal quotation marks omitted).

¹³ *Carolina Power & Light Co. v. City of Asheville*, 358 N.C. 512, 518, 597 S.E.2d 717, 722 (2004) (internal quotation marks and citations omitted).

¹⁴ 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/> (accessed on March 22, 2022) (emphasis added).

benefits of customer-sited generation.”¹⁵ Therefore, the Companies’ Joint Application should be rejected pending a Commission-led cost-benefit analysis. As discussed in the next section of these Initial Comments, that Commission-led process should comply with the applicable standard of care for cost-benefit analyses, including the performance of a full Value of Solar Study.

B. The Applicable Standard of Care for Conducting Cost-Benefit Analyses

The applicable standard of care for conducting cost-benefit analyses of distributed energy resources, including solar, is set by the National Energy Screening Project’s *National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources* (“NSPM-DER”).¹⁶ The NSPM-DER contains detailed rules governing the performance of cost-benefit analyses.¹⁷ According to Mr. Powers, “[i]t is this Manual that should be utilized by the Commission to evaluate the costs and benefits of NEM solar.”¹⁸

Among other things, the NSPM-DER recommends a detailed analysis of **customer and societal impacts** which should be examined in every cost-benefit analysis of NEM solar—*i.e.*, a Value of Solar Study is recommended by the NSPM-DER. According to the NSPM-DER, at least the following issues should be examined: low-income customer non-energy impacts, greenhouse gas emissions,

¹⁵ N.C. Gen. Stat. § 62-126.4(b).

¹⁶ **Attachment A**, Powers’ Report, pp. 21-22.

¹⁷ *Id.*

¹⁸ *Id.* at 22.

incremental economic development and job impacts, health impacts, energy imports and energy independence, etc.¹⁹

Similarly, the National Renewable Energy Laboratory has stated that at least the following categories of costs and benefits are typically considered in a Value of Solar Study: (1) energy, (2) generation capacity, (3) transmission and distribution losses, (4) transmission and distribution capacity, (5) environmental costs and benefits (such as avoided emissions), (6) ancillary services (such as voltage control), and (7) other factors, such as fuel hedging.²⁰

This standard of care governing cost-benefit analyses of NEM solar is further illustrated by examining analyses performed in North Carolina by independent consultants. For instance, on October 18, 2013, R. Thomas Beach (“Mr. Beach”) and Patrick G. McGuire (“Mr. McGuire”) of Crossborder Energy issued a report entitled *The Benefits and Costs of Solar Generation for Electric Ratepayers in North Carolina*.²¹ In that study, Mr. Beach and Mr. McGuire performed a detailed analysis of both the costs and value of solar. For instance, the Beach/McGuire study examined factors such as “Avoided Emissions,” environmental issues, and other societal benefits of solar generation.²²

¹⁹ NSPM-DER Ch. 4.

²⁰ **Attachment A**, Powers’ Report, p. 21; see also NREL, *Distributed Solar Photovoltaic Cost-Benefit Framework Study: Considerations and Resources for Oklahoma*, p. ix, August 2019, at <https://www.nrel.gov/docs/fy19osti/72166.pdf> (accessed on March 22, 2022).

²¹ R. Thomas Beach & Patrick G. McGuire, *The Benefits and Costs of Solar Generation for Electric Ratepayers in North Carolina*, October 18, 2013, at https://energync.org/wp-content/uploads/2017/03/Benefits_Costs_Solar_Generation_for_Electric_Ratepayers_NC.pdf (accessed on March 22, 2022).

²² *E.g.*, *id.* at 1 & 3.

Notably, Mr. Beach was the consultant hired by several of the signors to the MOU during the NEM litigation in South Carolina.²³ As discussed in more detail below, in the South Carolina NEM litigation involving Dominion Energy South Carolina, Mr. Beach, following a cost-benefit analysis similar to that which he conducted in North Carolina, concluded that “there is not presently a cost shift from solar customers to non-participating ratepayers,” and “there are significant, quantifiable societal benefits from distributed solar, including public health benefits from reduced air pollution and from mitigating the damages from carbon emissions.”²⁴

These reports by Mr. Beach illustrate that the standard of care for cost-benefit analyses requires the consideration of the costs and benefits, including societal benefits, of solar. As discussed in the next section, the Companies failed to comply with this standard of care.

C. The Companies Have Failed to Conduct a Cost-Benefit Analysis Consistent with the Applicable Standard of Care and as Required by House Bill 589.

According to Mr. Powers’ Report and the evidentiary record, the Companies failed to conduct a Value of Solar Study as required by the applicable standard of care.²⁵ Therefore, the Companies failed to fulfill the mandate of House Bill 589 that “an investigation of the costs and benefits of customer-sited generation” be conducted.²⁶

²³ See PSCSC, Docket No. 2019-182-E, *Rebuttal Testimony of R. Thomas Beach*, October 29, 2020.

²⁴ *Id.* at 2.

²⁵ **Attachment A**, Powers’ Report, pp. 21-23.

²⁶ N.C. Gen. Stat. § 62-126.4(b).

In the above-captioned docket, NC WARN served the following data request upon the Companies: “Provide any value-of-solar studies completed by the Companies in the last ten years for distributed (rooftop) solar.”²⁷ In response, the Companies stated: “The Company has calculated the value of solar through both embedded and marginal lenses. These studies are provided through question 2 in the Public Staff’s Data Request sent December 22, 2021.”²⁸

The Companies’ answer was non-responsive. In fact, the studies referenced by the Companies evaluated embedded costs and marginal costs—not the value or benefits of NEM solar. The Companies’ response to “question 2 in the Public Staff’s Data Request” described these studies exclusively in terms of costs: “Attached, please see the final versions of the embedded and marginal cost studies and supporting modeling, which are updated and vary slightly from those cost studies shared previously in an informal data request.”^{29, 30} At no place within the Companies’ response did they reference how these studies analyzed the benefits of NEM solar. The reason is simple: the Companies failed to meaningfully analyze the benefits of NEM solar.

²⁷ **Attachment O**, the Companies’ Response to NC WARN’s Data Request No. 1-16.

²⁸ *Id.*

²⁹ **Attachment N**, the Companies Response to the Public Staff’s Data Request No. 1-2 (emphasis added).

³⁰ The studies produced by the Companies in response to the Public Staff’s Data Request No. 1-2 (**Attachment N**) were produced as part of a Zip file which included multiple native Excel format spreadsheets. Due to the nature of these files, it was not possible to convert the same to Adobe PDF for filing purposes. Upon request, undersigned counsel will provide the native files to Commission staff and/or the parties.

Even if the Companies' studies briefly grapple with the benefits of NEM solar (which is denied), it is incontestable that the Companies' studies failed to analyze, or even mention, the societal value of solar, such as environmental impacts. As described above, these social-value components of a cost-benefit analysis are mandatory under the applicable standard of care. Therefore, even the purported studies cited by the Companies are woefully deficient.

Indeed, the Public Staff served data requests in this docket which cast doubt upon the supposed notion that the Companies conducted a Value of Solar Study. For instance, the Public Staff served the following data request upon the Companies: "Please explain why the Companies declined to perform a Value of Solar Study to assist in developing the proposed Rider RSC."³¹ In response, the Companies went into extensive detail about their examination of the cost of NEM solar. For instance, the Companies explained that "Duke Energy provided embedded and marginal cost analyses."³² However, the Companies were able to offer only a single weak example of the evaluation of the value of NEM solar: "While the Companies did not retain a third party to perform a Value of Solar Study (VOSS), as part of the Comprehensive Rate Review stakeholder process, the Companies did perform a VOSS, which was shared with stakeholders."³³ However, as explained below, the Comprehensive Rate Review stakeholder process is entirely inadequate as a Value of Solar Study.

³¹ **Attachment P**, the Companies' Response to the Public Staff's Data Request No. 1-28.

³² *Id.*

³³ *Id.*

The Companies' analysis is flawed for yet more reasons. For instance, the Companies' cost of service studies were based on data from test-year 2018.³⁴ This data is ancient, and the Companies' studies are therefore unreliable.

By the Companies' own admission, they have not hired an independent third party to perform a Value of Solar Study.³⁵ Instead, the Companies ask both stakeholders and this Commission to "take their word for it" that an accurate analysis (based upon outdated 2018 data) has been conducted internally by the Companies of the costs and benefits of solar. But their word, by itself, is insufficient to satisfy the requirement of House Bill 589 that "an investigation of the costs and benefits of customer-sited generation" be conducted.³⁶ In violation of the plain language and intent behind House Bill 589, the Companies are the fox guarding the hen house.³⁷

D. The NEM Portion of the Rate Design Stakeholder Process Cannot Satisfy the Requirement of a Value of Solar Study.

The Companies will argue that the requirement of a Value of Solar Study was satisfied by the NEM portion of the Rate Design Stakeholder Process. As

³⁴ **Attachment N**, the Companies' Response to the Public Staff's Data Request No. 1-2.

³⁵ **Attachment P**, the Companies' Response to the Public Staff's Data Request No. 1-28.

³⁶ N.C. Gen. Stat. § 62-126.4(b) (emphasis added).

³⁷ 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/> (accessed on March 22, 2022) (quoting Rep. John Szoka (R-Cumberland), the chief author of House Bill 589, as follows: "We're not putting the fox in charge of the hen house here. That is not the intent.").

described in Mr. Powers' Report, this argument should be rejected as clearly erroneous.³⁸

In fact, the NEM portion of the Rate Design Stakeholder Process minimized discussion and instead sought to achieve approval for the Companies' NEM tariffs. The numerous defects with the NEM portion of the Rate Design Stakeholder Process were discussed in detail within NC WARN and Appalachian Voices' *Response to Duke Energy's Rate Design Study Quarterly Status Report for Third Quarter 2021*.³⁹ By way of example but not limitation, the NEM portion of the Rate Design Stakeholder Process was defective for the following reasons:

- The NEM portion of the Rate Design Stakeholder Process was inexplicably, and without the consultation of stakeholders, placed on a "fast track" process.⁴⁰ Pursuant to this "fast track" process, the NEM topic was the subject of discussion over a mere six (6) weeks. Various stakeholders expressed repeated objections to the inclusion of NEM on a "fast track" process. The placement of NEM on a "fast track" process is indefensible given that there is no deadline for the implementation of revised NEM tariffs,⁴¹ and the concept of NEM presents extremely complicated factual issues regarding cost-shifts, TOU and CPP, and

³⁸ **Attachment A**, Powers' Report, pp. 22-23.

³⁹ *NC WARN and Appalachian Voices' Response to Duke Energy's Rate Design Study Quarterly Status Report for Third Quarter, 2021* NCUC Docket Nos. E-7, Sub 1214 & E-2, Sub 1219, November 15, 2021.

⁴⁰ *Id.* at 4-6.

⁴¹ The applicable statute, N.C. Gen. Stat. § 62-126.4(c), states that retail customers may "continue net metering under the net metering rate in effect at the time of interconnection until January 1, 2027," but no provision of Chapter 62 requires that revised NEM tariffs be approved before January 1, 2027.

other complex issues. NEM is not susceptible to meaningful analysis on a “fast track” basis.

- The entire structure of the NEM portion of the Rate Design Stakeholder Process was designed to promote adoption of a South Carolina-based model. As the Commission is aware, on or about May 19, 2021, the Public Service Commission of South Carolina (“PSCSC”) approved a Memorandum of Understanding (“SC MOU”) concerning NEM tariffs between the Companies and several prominent participants of the Rate Design Stakeholder Process.⁴² During the initial Fast Track Working Group Kick-Off meeting held on July 6, 2021, the third-party facilitator, ICF, made a presentation which forecast that the entire NEM discussion would focus upon the model espoused in the SC MOU. A copy of the only slide on NEM presented during this Kick-Off meeting is as follows:

Subgroup B: NEM Designs, NC/SC Differences

- In-scope:
 - Review of SC Settlement
 - Mandatory TOU-CPP Rate design
 - Netting policy
 - Non-bypassable rider collection
 - DSM/EE incentives
 - Grandfathering policy
 - Non-residential NEM policies
 - NC changes
 - TOU period changes (as discussed in Subgroup A)
 - GAF methodology

⁴² PSCSC Docket Nos. 2020-264-E & 2020-265-E.

Obviously, the Companies and ICF considered that the only matters “In-scope” for NEM during the Rate Design Stakeholder Process were the SC MOU, and any modest tweaks which might be made in North Carolina.⁴³

- The NEM portion of the Rate Design Stakeholder Process was plagued by the untimely, half-hearted distribution of material information. By way of example, the slide-deck used during the meeting on July 22, 2021, which was shared at 3:47 pm on the afternoon before the meeting, contained substantive information designed by the Companies to encourage adoption of their preferred TOU windows applicable to the NEM tariffs. This late disclosure made it impossible to prepare for discussions to be held the very next day (*i.e.*, July 22, 2021). NC WARN and Appalachian Voices’ *Response to Duke Energy’s Rate Design Study Quarterly Status Report for Third Quarter 2021* provided a detailed chronology which proves that agendas, slide-decks and other substantive information were provided in a manner which eliminated the possibility of meaningful discussion.⁴⁴

In addition to the above procedural issues, the NEM portion of the Rate Design Stakeholder Process cannot satisfy the definition of an “investigation” as required by House Bill 589.⁴⁵ An “investigation” implies a thorough analysis of the data by subject-matter experts. Instead, the NEM portion of the Rate Design

⁴³ NC WARN and Appalachian Voices’ *Response to Duke Energy’s Rate Design Study Quarterly Status Report for Third Quarter, 2021* NCUC Docket Nos. E-7, Sub 1214 & E-2, Sub 1219, pp. 6-8, November 15, 2021.

⁴⁴ *Id.* at 8-13.

⁴⁵ N.C. Gen. Stat. § 62-126.4(b) (“The rates shall be nondiscriminatory and **established only after an investigation** of the costs and benefits of customer-sited generation.” (emphasis added)).

Stakeholder Process occurred over a short six (6) weeks, involved very limited access to data, and participants had no right to conduct discovery.

In the Joint Application, the Companies stated: “the Companies surveyed several organizations participating in these workshops, and that survey revealed that 80% of those organizations were either ‘supportive’ or ‘very supportive’ of the overall NEM proposal offered by the Companies.”⁴⁶ In response to NC WARN’s data requests, the Companies provided a spreadsheet summarizing the said survey conducted during the NEM portion of the Rate Design Stakeholder Process.⁴⁷ The Companies’ representation of the results of this survey is simply not accurate.

Eighteen (18) participants responded to the survey.⁴⁸ Of those eighteen (18) respondents, at least six (6) were signors to the NC MOU and/or the SC MOU, or law firms representing the said signors, namely: SACE, Coastal Conservation League, Southern Environmental Law Center, NC Sustainable Energy Association, Vote Solar, and Sunrun.⁴⁹ Obviously the inclusion of those survey respondents who were already committed to the SC MOU—and were therefore already committed to a similar model in North Carolina⁵⁰—injected substantial bias into the survey results.

⁴⁶ Joint Application, p. 11.

⁴⁷ **Attachment Q**, the Companies’ Response to NC WARN’s Data Request No. 2-4.

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ On page 1, the SC MOU states: “The Parties intend to work collaboratively to advance the terms of this [SC] MOU, including engaging other stakeholders on this matter in advance of filing the Solar Choice Tariffs in South Carolina and to obtain the PSCSC and the North Carolina Utilities Commission

In fact, a review of the survey results reveals that only four (4) respondents who did not sign the preexisting SC MOU were supportive of the proposed NEM tariffs: CIGFUR (“Somewhat supportive with moderate changes”), Synapse (“Supportive with minor changes”), an unnamed individual (“Somewhat supportive with moderate changes”), and Alliance for Transportation Electrification (“Very supportive”).⁵¹ Accordingly, the Companies’ argument that the Rate Design Stakeholder Process generated support for the proposed NEM tariffs is factually incorrect. This lack of support is especially troublesome given that, as discussed above, the entire stakeholder process was designed by the Companies to avoid discussion and data-sharing in favor of promoting the supposed merits of the proposed NEM tariffs.

For all of these reasons, among others, the Rate Design Stakeholder Process cannot satisfy the mandate of House Bill 589 that “an investigation of the costs and benefits of customer-sited generation” be conducted.⁵²

III. The Companies’ Proposed NEM Tariffs Would Reduce the Economic Value of Rooftop Solar Systems by Approximately Thirty Percent (30%), Thereby Disincentivizing Rooftop Solar and Violating North Carolina’s Public Policy.

The Companies’ responses to data requests in the above-referenced docket prove that the proposed NEM tariffs would drastically reduce the economic

(“NCUC”) approvals necessary to effectuate this [SC] MOU. The Parties ultimately desire to avoid a contentious adversarial proceeding before the PSCSC or the NCUC by collaborating to implement the Solar Choice Tariffs within the spirit of Act 62 and North Carolina law.”

⁵¹ **Attachment Q**, the Companies’ Response to NC WARN’s Data Request No. 2-4.

⁵² N.C. Gen. Stat. § 62-126.4(b).

value of rooftop solar systems. According to Mr. Powers, the evidence shows “a 30 percent reduction in value for these NEM systems under the proposed tariff and without the incentive payment.”⁵³

In his report, Mr. Powers describes how “the Year 1 NEM savings under the DEC residential RS tariff for an 8.37 kW solar array would decline from \$75.76 per month to \$53.59 per month.”⁵⁴ This reduction in savings amounts to twenty-nine percent (29%) for DEC’s NEM customers under the RS tariff.⁵⁵ Similarly, according to Mr. Powers’ analysis, “[t]he Year 1 NEM savings under the DEC residential RE tariff for an 9.95 kW solar array would decline from \$85.42 per month to \$59.03 per month,” which is “a 31 percent decline in NEM savings” for DEC’s NEM customers under the RE tariff.⁵⁶

Unfortunately, this significant savings reduction is similar for DEP’s NEM customers. According to Mr. Powers, “[t]he Year 1 NEM savings under the DEP residential RES tariff for an 9.09 kW solar array would decline from \$97.61 per month to \$68.44 per month.”⁵⁷ This reduction in savings amounts to thirty percent (30%) for DEP’s NEM customers.⁵⁸

In short, the Companies’ proposed NEM tariffs would drastically reduce the value of solar systems to NEM customers. This disincentivization of rooftop solar is inconsistent with the public policy of North Carolina.

⁵³ **Attachment A**, Mr. Powers’ Report, p. 10.

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ *Id.*

For example, in Executive Order No. 80, Governor Cooper directed the development of a state Clean Energy Plan.⁵⁹ The resulting Clean Energy Plan sets goals to reduce electric utilities' greenhouse gas emissions by 70% below 2005 levels by 2030 and achieve carbon neutrality by 2050.⁶⁰ Discouraging the installation of rooftop solar, as the Companies propose to do, is completely inapposite with Executive Order No. 80 and the Clean Energy Plan.

Relatedly, House Bill 951 was signed into law by Governor Cooper on October 13, 2021. Among other things, House Bill 951 "requires implementation of a carbon emissions reduction plan for the State's public utilities,"⁶¹ including the Companies. The Companies' discouragement of rooftop solar undermines this goal of reducing carbon emissions.

This is the worst possible time to discourage rooftop solar and undermine the above-cited carbon-reduction goals. In a new report issued on March 28, 2022, the Environmental Defense Fund ("EDF") analyzed emissions data and concluded "that North Carolina will fall short of its 2025 and 2030 climate targets without additional policies to curb emissions."⁶² The new report by EDF illustrates the

⁵⁹ *Executive Order No. 80*, October 29, 2018, at <https://files.nc.gov/governor/documents/files/EO80-%20NC%27s%20Commitment%20to%20Address%20Climate%20Change%20%26%20Transition%20to%20a%20Clean%20Energy%20Economy.pdf> (accessed on March 22, 2022).

⁶⁰ *North Carolina Clean Energy Plan*, October 2019, at https://files.nc.gov/ncdeq/climate-change/clean-energy-plan/NC_Clean_Energy_Plan_OCT_2019_.pdf (accessed on March 22, 2022).

⁶¹ Joint Application, p. 7.

⁶² *New Report: North Carolina Off Track for Reaching its Own Climate Goals*, Environmental Defense Fund, March 28, 2022, at <https://www.edf.org/media/new-report-north-carolina-track-reaching-its-own-climate-goals> (accessed on March 29, 2022).

urgent need for the Commission and the Companies to foster—not undermine—rooftop solar. Otherwise, it will become even more difficult to meet the carbon-reduction goals cited above.

Given North Carolina public policy designed to curb the ongoing climate crisis, rooftop solar is more important than ever. Yet the Companies' proposed NEM tariffs will exacerbate the climate crisis by reducing the savings from rooftop solar by about thirty percent (30%) and thereby discouraging the Companies' customers from installing rooftop solar.

IV. The Companies' NEM Tariffs Propose an Extravagant MMB Which Is Devoid of Any Evidentiary Support.

A. The MMB Proposed by the Companies Is Extravagant.

In the Joint Application, DEC proposed a Minimum Monthly Bill ("MMB") for NEM customers of \$22 per month, and DEP proposed a MMB for NEM customers of \$28 per month.⁶³ This MMB is unnecessarily extravagant and should therefore be treated with great skepticism.

According to the MOU in NC, the purpose of the MMB is "to ensure recovery of customer and distribution costs from residential NEM customers."⁶⁴ However, as described by Mr. Powers, the Companies' "residential NEM solar customers already pay a BFC [*i.e.*, Basic Facilities Charge] of \$14 per month (except for customers on two DEP TOU rate schedules who pay \$16.85 per month)."⁶⁵ The purpose of the BFC is to "cover[] fixed costs of providing service to your location

⁶³ Joint Application, p. 14.

⁶⁴ Joint Application, Exhibit A to the MOU.

⁶⁵ **Attachment A**, Powers' Report, pp. 6-7.

as well as maintaining customer records, billing and other transactions affecting your account.”⁶⁶ Hence, there is tremendous redundancy between the BFC and the MMB. Moreover, according to Mr. Powers, “[t]he BFC range is presently at the high end of BFC charges paid by utility customers around the country.”⁶⁷ Accordingly, the addition of a MMB further exacerbates the Companies’ already extravagant fixed charges imposed upon NEM customers.

The Companies will argue that the onerous nature of the MMB is mitigated by certain offsets. However, these offsets are largely illusory. In response to the Public Staff’s data requests, the Companies provided a spreadsheet, with formulas intact, which can be used to estimate a customer’s monthly bill under the proposed NEM tariffs.⁶⁸ According to the Public Staff, “[t]he purpose of this request is to better understand how the non-by-passable charges, grid access fee (GAF), and monthly minimum bill (MMB) interact.”⁶⁹

The spreadsheet provided by the Companies in response to the Public Staff’s data request⁷⁰ demonstrates the illusory nature of the MMB offsets. Following an analysis of this spreadsheet, Mr. Powers concluded, “In the DEC example provided in the NEM bill calculator, only \$9.92 of the NEM customer’s

⁶⁶ *Id.* at 7.

⁶⁷ *Id.*

⁶⁸ **Attachment G**, the Companies’ Response to Public Staff Data Request No. 1-1.

⁶⁹ *Id.*

⁷⁰ The referenced spreadsheet, which was produced in native Excel format, obviously cannot be used to calculate monthly bills when filed in Adobe PDF format. Accordingly, **Attachment G** omits the actual spreadsheet. Upon request, undersigned counsel will provide the native Excel version of the spreadsheet to Commission staff and/or the parties.

\$58.82 of accrued monthly volumetric energy charges (for 405 kWh of purchased electricity) count toward offsetting the MMB.”⁷¹

This extremely modest offset occurs “because Duke Energy has determined that only a relatively small portion of the volumetric energy charge is usable to offset the MMB,” and “[e]nergy production charges and production and transmission demand charges, which together comprise about two-thirds of the DEC volumetric energy charge, are not eligible to offset the MMB.”⁷² Therefore, NEM customers “will need to accrue substantial monthly volumetric charges (\$58.82/month [in the DEC example]) to offset relatively small MMB ‘gap’ charges (\$9.92/month [in the DEC example]).”⁷³ According to Mr. Powers, similar results follow from an examination of DEP’s proposed MMB.⁷⁴

Therefore, the MMB is both redundant of the BFC and is overly extravagant because, among other reasons, the offset feature is illusory.

B. There Is No Evidentiary Support for the MMB, Partly Because the Companies’ Cost-Shift Analysis Contains Several Flaws.

To support the MMB, the Companies claim that there is a cost-shift from NEM residential customers to non-NEM residential customers. However, the entire concept of a cost-shift is unsupported by the evidence, partly because the Companies’ cost-shift analysis contains several analytical flaws. Therefore, the MMB proposed in the Companies’ NEM tariffs should be rejected.

⁷¹ **Attachment A**, Powers’ Report, p. 7.

⁷² *Id.*

⁷³ *Id.*

⁷⁴ *Id.*

First, it is important to place the alleged cost-shift into context. The Companies allege a cost-shift from NEM residential customers to non-NEM residential customers of approximately \$10 million at the end of 2020.⁷⁵ However, according to Mr. Powers, this is only “1/100th the approximately \$1 billion per year that residential DEC and DEP customers pay in excess of what the DEC and DEP full cost-of-service (‘COS’) studies indicate they should be paying.”⁷⁶ In other words, the Companies’ residential customers are already “paying 25 percent more than their full COS.”⁷⁷ Hence, the amount of the alleged NEM cost shift is insignificant compared with the additional costs already being borne by the Companies’ residential customers relative to other customer classes. If the goal is to rectify cost shifts, it is extremely unfair to begin with residential NEM customers.

In fact, the Companies’ cost-shift analysis is flawed because of this emphasis upon residential NEM customers to the exclusion of an examination of the cost-shifts caused by other customer classes. Indeed, the Joint Application “focuses exclusively on addressing the alleged cost-shift between two subsets of residential customers,” namely NEM residential customers and non-NEM residential customers.⁷⁸ By exclusively analyzing this single category of cost shift, the Joint Application fails “to assess the alleged cost-shift between NEM customers as a whole (both residential NEM and non-residential NEM customers), and non-

⁷⁵ *Id.* at 4.

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ *Id.* at 5.

NEM residential and non-residential customers.”⁷⁹ Therefore, the Companies have presented a flawed, unreliable cost-shift analysis.

According to Mr. Powers, had the Companies meaningfully analyzed the cost-shift between all NEM and all non-NEM customers—as opposed to just residential customers—the results would likely have revealed that the true cost-shift is in favor of non-NEM customers.⁸⁰ In support of this conclusion, Mr. Powers relied upon a thorough cost-shift analysis conducted in the State of California, which found that, collectively, “the NEM residential and non-residential customers were paying 103 percent of their full COS.”⁸¹ In other words, “the NEM customers were collectively paying more than their full COS—\$12 million per year more—providing net cost benefits to non-NEM customers.”⁸² The Companies’ flawed approach to the cost-shift problem, which meaningfully analyzed only residential customers, failed to consider these issues. Until these flaws are rectified, the Companies’ cost-shift conclusions are unreliable.

The Companies’ cost-shift analysis is flawed for yet further reasons. For instance, the installation of “NEM solar can reduce or eliminate expansion of the transmission and distribution (‘T&D’) system that would otherwise be necessary to accommodate load growth and grid congestion at times of peak demand.”⁸³ Yet

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ *Id.* at 6.

⁸² *Id.*

⁸³ *Id.* at 8.

the Companies' "avoided T&D calculation assumes incorrectly that NEM solar is only deferring T&D expansion that will inevitably occur, and not eliminating it."⁸⁴

Indeed, Mr. Powers' analysis establishes that the value of NEM for eliminating capital investment in T&D expansion is substantially greater than the avoided T&D value of NEM that the Companies assume in their cost-shift analysis. Drawing upon analyses in the ongoing California NEM litigation, Mr. Powers calculated that "the avoided cost of high voltage transmission alone would be about \$935 per year per typical 9 kW" system.⁸⁵ This is substantially greater than the NEM avoided T&D value assumed by the Companies (\$196-\$247/year for DEC and \$127/year for DEP).⁸⁶

In his report, Mr. Powers identified yet another savings caused by NEM solar which the Companies failed to correctly analyze. As described by Mr. Powers, a significant "potential savings is achieved by NEM solar, as much as \$1,600 per year per 9 kW NEM system . . . when NEM solar substitutes for remote utility-scale solar that is reliant on new or upgraded transmission to enable it to be delivered to demand centers."⁸⁷ Combined, the Companies "are investing about \$1 billion per year on new reliability and expansion-related transmission and distribution projects."⁸⁸ According to Mr. Powers' analysis, "[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

⁸⁴ *Id.*

⁸⁵ *Id.*

⁸⁶ *Id.*

⁸⁷ *Id.* at 9.

⁸⁸ *Id.*

reinforcement between these demand centers and rural southeastern North Carolina utility-scale solar farms, and potentially for expansion-related distribution projects.”⁸⁹

Had the Companies not committed these material flaws, the results of their cost-shift analysis would have been considerably different. An instructive example involves the recent NEM litigation in South Carolina involving Dominion Energy South Carolina (“DESC”). During that said litigation, several of the signors to the MOU in NC sponsored testimony by Mr. Beach which stated as follows:

As a result, there is not presently a cost shift from solar customers to non-participating ratepayers Finally, there are significant, quantifiable societal benefits from distributed solar, including public health benefits from reduced air pollution and from mitigating the damages from carbon emissions.⁹⁰

Partially in reliance upon this testimony, the PSCSC rejected the tariff proposed by DESC and concluded that the utility’s cost-shift analysis was flawed: “DESC’s methodology for calculating cost shift, as discussed in the testimony of Witness Everett, is unreasonable because its methodology does not consider all of the benefits of customer-generated solar.”⁹¹ In fact, the PSCSC concluded that there was no cost shift at all: “The portions of the Joint Solar Choice Proposal approved in this Order do not cause a significant potential cost-shift when

⁸⁹ *Id.*

⁹⁰ PSCSC, Docket No. 2019-182-E, *Rebuttal Testimony of R. Thomas Beach*, October 29, 2020, at p. 2.

⁹¹ PSCSC, Docket No. 2020-229-E, Order No. 2021-391, Order Establishing Solar Choice Tariff for Customers Beginning June 1, 2021, pp. 23-24.

considering the cost to serve residential solar customer-generators under DESC's existing embedded cost of service methodology."⁹²

As described above, and in Mr. Powers' report, the Companies' cost-shift analysis is riddled with flaws. The Companies have failed to establish that there is a cost-shift from NEM residential customers to non-NEM residential customers. Indeed, the example of DESC in South Carolina shows that a reasonable analysis will reveal that there is no cost shift. Therefore, there is no evidentiary basis for the MMB, and the Commission should reject the MMB being proposed by the Companies.

V. The Companies' Proposed Tariffs Would Force NEM Customers onto TOU and CPP Arrangements Which Are Not Supported by Evidence and Disadvantage Rooftop Solar.

As discussed *supra*, the Companies seek to force all NEM customers onto TOU and CPP arrangements. The Joint Application would subject all NEM customers to tariffs involving an off-peak rate, discount rate (1am-6am summer; 1am-3am & 11am-4pm winter), a high on-peak pricing window of 6pm-9pm in summer and 6am-9am winter, and CPP for high-demand dates.⁹³

During on-peak and CPP periods, NEM customers would pay higher rates to purchase power from the grid. This would be especially problematic for NEM

⁹² *Id.* at 28.

⁹³ For details of these TOU and CPP windows, see Duke Energy Carolinas, LLC's Compliance Tariffs for Dynamic Rate Pilots and Advanced TOU Rates, Docket Nos. E-7, Sub 1146 and E-7, Sub 1253, Sept. 1, 2021, pdf pp. 54-55 and 57-58, at <https://starw1.ncuc.net/NCUC/ViewFile.aspx?Id=fa7fce6d-a74a-4dfd-93d4-7982bd0634e1>, and Duke Energy Progress, LLC's Compliance Tariffs, Docket Nos. E-2, Subs 1219 and 1280, Jan. 18, 2022, pdf pp. 8-9, at <https://starw1.ncuc.gov/NCUC/ViewFile.aspx?Id=b7bddd24-0df1-496c-9e39-cdc50803158c>.

customers during the summer window (6pm-9pm). Obviously, the sun is on its way down by 6 pm, and much less solar energy will be generated after 6 pm. Therefore, as discussed by Mr. Powers, the proposed TOU windows are extremely disadvantageous to solar customers, who would be forced to pay the highest rate for power exactly when their solar systems stop generating power.⁹⁴

Perversely, the summer TOU on-peak window is also unsupported by the evidence. “In 2020, the DEC summer month peak hour in July, August, and September occurred between 4 pm – 5 pm. The 2020 DEP summer month peak hour occurred in the 4 pm hour.”⁹⁵ In other words, the Companies’ TOU windows are based upon where the Companies think that peak might eventually be—not where peak has historically been. To be specific, the Companies’ TOU windows are based upon where the Companies believe that peak will be in 2026.⁹⁶

NC WARN repeatedly requested that the Companies provide evidentiary support for these summer on-peak TOU windows. In response to NC WARN’s data requests, the Companies declined to provide any such information supporting the alleged shift in summer peak, and the Companies repeatedly dodged NC WARN’s data requests regarding the summer peak.⁹⁷

For instance, NC WARN’s Data Request No. 1-3 stated: “To the extent that DEC is proposing time of use windows based upon its prediction that peak will shift substantially by 2026, please provide (a) all data supporting this modeled shift, and

⁹⁴ **Attachment A**, Powers’ Report, pp. 15-18.

⁹⁵ *Id.* at 16.

⁹⁶ *Id.* at 15-16.

⁹⁷ **Attachment M**, the Companies’ Responses to NC WARN’s Data Request Nos. 4-1 & 4-2.

(b) the model used to predict the shift, and (c) all modeling input parameters, and (d) the basis for any assumptions used in defining the numeric value of the parameters.”⁹⁸ The Companies provided a non-responsive, non-substantive answer: “DEC is not proposing new time-of-use (TOU) windows in this docket. The filing in this docket only requires NEM customers to be served under Schedule RS-TC and RE-TC, but it does not establish new TOU windows.”⁹⁹ Clearly, this information did not fairly address NC WARN’s data request. Unfortunately, DEP provided a nearly identical response to a similar request.¹⁰⁰

In an effort to obtain this crucial information about the evidentiary basis for the summer on-peak window which the Companies seek to impose upon all NEM customers, NC WARN served another round of data requests designed to address the Companies’ prior non-responsive answers.¹⁰¹ Yet again, the Companies failed to provide responsive information. DEC provided a completely non-substantive response, simply stating that “the Companies are not proposing new time-of-use windows in this docket.”¹⁰² DEP also indicated that “the Companies are not proposing new time-of-use windows,” and DEP added that these TOU windows were studied during the “Comprehensive Rate Design Study.”¹⁰³ As described *supra*, that Rate Design Stakeholder Process was deeply flawed and one-sided,

⁹⁸ **Attachment R**, the Companies’ Response to NC WARN’s Data Request No. 1-3.

⁹⁹ *Id.*

¹⁰⁰ **Attachment R**, the Companies’ Response to NC WARN’s Data Request No. 1-8.

¹⁰¹ **Attachment M**, the Companies’ Responses to NC WARN’s Data Request Nos. 4-1 & 4-2.

¹⁰² *Id.* at No. 4-1.

¹⁰³ *Id.* at No. 4-2.

and the Companies' survey of participants in the stakeholder process was non-scientific and biased.¹⁰⁴

As set forth above, NC WARN has repeatedly requested that the Companies provide evidence in the present docket regarding the summer on-peak window which the Companies seek to impose upon every NEM customer. The Companies have failed to do so. Hence, there is simply no evidentiary basis for the TOU windows proposed in the Companies' NEM tariffs.

As discussed by Mr. Powers, the "previous DEC (pilot) *Residential Service Time-of-Use – Critical Peak Pricing* tariff, implemented in 2019, had a summer peak window of 2 pm – 8 pm, and a winter peak period windows of 6 am – 10 am and 6 pm – 9 pm."¹⁰⁵ Naturally, the previous summer peak window (2pm-8pm) "would substantially increase the revenue generated by a solar-only rooftop system on a TOU tariff."¹⁰⁶ In contrast to the 6pm-9pm window which the Companies seek to force upon all NEM customers, the prior summer peak window (2pm-8pm) was based upon the Time-of-Use and Seasonable Pricing Study issued in February 2018.¹⁰⁷ There is no comparable study—in fact, no evidence whatsoever—supporting the on-peak summer window of 6pm-9pm which the Companies seek to impose upon all NEM customers in the present docket.

¹⁰⁴ See Section II.D of these Initial Comments.

¹⁰⁵ **Attachment A**, Powers' Report, p. 16.

¹⁰⁶ *Id.*

¹⁰⁷ *Id.* at 17; see also Duke Energy Carolinas, LLC, Response to April 22, 2019 Order Requiring Additional Information, NCUC Docket No. E-7, Sub 1146, May 23, 2019, Attachment 1 - Duke Energy Carolinas Time-of-Use and Seasonal Pricing Study, February 2018.

Given that the proposed summer on-peak TOU window is extremely disadvantageous to solar customers, the lack of supporting evidence for that window justifies rejecting the Companies' proposed tariffs.

VI. The Companies' Proposed NEM Tariffs Omit Several Material Issues.

Several important issues are conspicuously absent from the Companies' proposed NEM tariffs. For instance, "[b]attery storage is rapidly becoming a standard element of NEM solar systems."¹⁰⁸ Given that the Companies propose to require NEM customers to contract for TOU and CPP windows, it is especially important that customers be allowed to avoid high on-peak pricing through battery storage technology. Yet the proposed NEM tariffs are silent on battery storage.

Moreover, the proposed NEM tariffs fail to include provisions for low- and fixed-income customers. According to Mr. Powers, "[a]n equitable, well-funded on-bill financing and/or on-bill repayment program, tied to the electric meter ('tariffed') and not to the customer, would potentially lessen the" above-described barriers presented by the Joint Application.¹⁰⁹

VII. The MOU Should Be Given No Weight by the Commission.

As the Commission is aware, the Companies' proposed tariffs are based upon a MOU among certain parties to the above-captioned docket. Significantly, that MOU is nonunanimous—*i.e.*, numerous prominent parties to the present docket would not agree to the MOU.

¹⁰⁸ **Attachment A**, Powers' Report, p. 20.

¹⁰⁹ *Id.* at 20-21.

In *State ex rel. Utilities Comm'n v. Carolina Util. Customers Ass'n*,¹¹⁰ the North Carolina Supreme Court, in the context of a general rate case, emphasized the skepticism which the Commission must exercise when considering a nonunanimous settlement agreement. The Supreme Court stated that "Chapter 62 contemplates a full and fair examination of evidence put forth by *all* of the parties," and "[t]o allow the Commission to dispose of a contested rate case by stipulation of less than all certified parties would effectively absolve the Commission of its statutory and due process obligations to afford all parties a fair hearing."¹¹¹ The Supreme Court proceeded to describe several problems with nonunanimous settlement agreements:

The adoption of a non-unanimous stipulation raises several due-process concerns. The most obvious is the possibility that opposing parties may be denied an opportunity to present evidence against acceptance of the stipulation. **A more subtle problem is the possibility of an unintentional shift of the burden of proof from the utility to the opponents of the stipulation. There is a danger that when presented with a ready-made solution, the Commission might unconsciously require that the opponents refute the agreement,** rather than require the utility to prove affirmatively that the proposed rates are just and reasonable.¹¹²

Therefore, the Supreme Court held that, notwithstanding the presence of a nonunanimous settlement agreement, the Commission nonetheless 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

¹¹⁰ 348 N.C. 452, 462-67, 500 S.E.2d 693, 701-03 (1998).

¹¹¹ *Id.* at 464, 500 S.E.2d at 702.

¹¹² *Id.* (emphasis added).

parties in light of all the evidence presented.”¹¹³ As set forth in these Initial Comments, the Companies cannot meet their evidentiary burden, and therefore, the proposed tariffs should be rejected notwithstanding the MOU.

It bears mentioning that the MOU has not fared well in other proceedings. For instance, in separate dockets, the Public Staff recommended that the Commission reject the Smart Saver incentive portion of the MOU.¹¹⁴ In fact, a virtually identical Smart Saver incentive, which was part of the SC MOU, was rejected by the PSCSC on January 13, 2022.¹¹⁵

Settlement agreements are part of a give-and-take process. In exchange for an incentive, a party to a settlement agreement might agree to a separate contractual term which, without the incentive, would otherwise be completely unpalatable. In light of the give-and-take nature of settlements, where one settlement term is rejected, arguably there is an erosion of the underlying basis for other portions of the settlement agreement. To be specific, if the Commission rejects the Smart Saver incentive—which is part of the MOU but the subject of separate dockets¹¹⁶—then the MOU should be completely disregarded by the Commission in the present docket.

¹¹³ *Id.* at 466, 500 S.E.2d at 703

¹¹⁴ Comments of the Public Staff, March 15, 2022, NCUC Docket Nos. E-2 Sub 1287 & E-7 Sub 1261.

¹¹⁵ PSCSC, Docket Nos. 2021-143-E & 2021-144-E, Commission Directive, January 13, 2022.

¹¹⁶ NCUC Docket Nos. E-2 Sub 1287 & E-7 Sub 1261

CONCLUSION

The Companies' proposed NEM tariffs violate House Bill 589 and are unsupported by the evidence. For the reasons discussed herein, the Commission should reject the Joint Application. As required by House Bill 589, the Commission should lead a cost-benefit analysis of solar generation, which would include a Commission-led Value of Solar Study. Only upon the conclusion of these studies should new NEM tariffs be proposed by the Companies.

This the 29th day of March, 2022.

/s/ Matthew D. Quinn

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CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the foregoing document upon all counsel of record by email transmission.

This the 29th day of March, 2022.

/s/ Matthew D. Quinn

Matthew D. Quinn

*Attorney for NC WARN, NCCSC &
Sunrise Durham*