

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 SURREPLY 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 Granting Extension of Time to File Reply Comments and Allowing Parties to File Responsive Comments* entered on May 13, 2022 in the above-referenced docket, Intervenor NC WARN, North Carolina Climate Solutions Coalition, and Sunrise Movement Durham Hub (collectively, "NC WARN *et al.*"), through undersigned counsel, hereby submit the following Joint Surreply Comments:

SUMMARY OF NC WARN *ET AL.*'S COMMENTS

I. Initial Comments

NC WARN *et al.* filed Joint Initial Comments in the above-captioned proceeding on March 29, 2022. In the Joint Initial Comments, NC WARN *et al.* urged the Commission to reject the net energy metering ("NEM") tariffs proposed by Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP") (collectively, the "Companies") for the following reasons, among others:

- Pursuant to House Bill 589, “The Commission shall establish net metering rates **under all tariff designs**”¹ The Companies, however, failed to propose NEM rates “under all tariff designs.”² Instead, the Companies’ Joint Application sought 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.³

- 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.”⁴ No such “investigation” has been conducted.⁵ To the contrary, the Companies support their proposed NEM tariffs with (i) a barebones seven-page embedded and marginal cost study and (ii) a one-sided “Fast Track” stakeholder process which, in the words of the Attorney General’s Office, “did not analyze potential benefits of customer-sited generation.”⁶ In furtherance of House Bill 589, the Commission must lead a Value of Solar Study and establish NEM tariffs based upon the results of that Commission-led study.⁷

¹ N.C. Gen. Stat. § 62-126.4(b) (emphasis added).

² NC WARN *et al.*’s Initial Comments, pp. 7-9.

³ On May 19, 2022, the Companies proposed an alternative “Bridge Rate” which does not include a TOU-CPP rate schedule. As discussed below, the Bridge Rate has a short-term 4-year eligibility period and is subject to annual participation caps. The fleeting nature of the Bridge Rate cannot overcome the Companies’ failure to propose a flat-rate tariff comparable to the 10-year TOU-CPP NEM tariffs proposed in the Companies’ Joint Application.

⁴ N.C. Gen. Stat. § 62-126.4(b).

⁵ NC WARN *et al.*’s Initial Comments, pp. 9-22.

⁶ AGO’s Initial Comments, pp. 3-4.

⁷ NC WARN *et al.*’s Initial Comments, pp. 9-12.

- The Companies' proposed NEM tariffs would disincentivize the installation of rooftop solar. In fact, 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%).⁸ 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 ("MMB") upon NEM customers. Despite the onerous nature of the MMB, the Companies have failed to establish any cost-shift which could feasibly justify the MMB. Among other flaws with their cost-shift analysis, the Companies failed to fully account for the elimination of transmission and distribution investments which would result from the proliferation of rooftop solar.⁹

- The Companies' tariffs would require NEM customers to sign up for TOU tariffs with CPP windows. The summer on-peak window is uniquely damaging to rooftop solar, yet the same on-peak window is completely unsupported by evidence. Indeed, NC WARN has repeatedly asked the Companies to supply evidence supporting the summer on-peak window, and the Companies have declined to do so.¹⁰

- Finally, the Companies' proposed tariffs omit several important provisions, such as provisions for battery storage and low-income customers.¹¹

⁸ *Id.* at 22-25.

⁹ *Id.* at 25-32.

¹⁰ *Id.* at 32-36.

¹¹ *Id.* at 36.

II. Reply Comments

On May 12, 2022, NC WARN *et al.* timely filed Joint Reply Comments. In the Joint Reply Comments, NC WARN *et al.* addressed the following issues which arose during the initial comments phase of the above-captioned docket:

- The various initial comments revealed widespread agreement that the Companies have not conducted the mandatory “investigation of the costs and benefits of customer-sited generation.”^{12, 13}
- As recognized in the initial comments of other intervenors, the Companies’ purported cost-benefit analysis—which is actually just a marginal and embedded cost study—failed to meaningfully analyze the **benefits** of NEM solar. Apparently, the only intervenor to endorse the Companies’ supposed cost-benefit analysis is the Public Staff, yet the Public Staff’s argument is analytically flawed and completely ignores the standard of care which controls the performance of a cost-benefit analysis.¹⁴
- In their initial comments, several intervenors identified specific benefits of NEM solar which the Companies failed to capture. For instance, in their Initial Comments, NCSEA, SACE and Vote Solar (collectively, “NCSEA *et al.*”) correctly noted that “there are several benefits of distributed renewable generation that DEC and DEP have not quantified,” including “avoided costs for carbon emissions and fuel hedging benefits, which combined could add approximately 4

¹² N.C. Gen. Stat. § 62-126.44(b).

¹³ NC WARN *et al.*’s Reply Comments, pp. 5-7.

¹⁴ *Id.* at 8-14.

to 5 cents per kWh to the benefits.”¹⁵ When appropriate corrections are made, it becomes obvious that the Companies’ claims of a “cost-shift” are unfounded. In fact, NEM solar is a net benefit to ratepayers.¹⁶

- The initial comments of nearly all intervenors agreed that the Companies’ proposed NEM tariffs would drastically reduce the economic value of rooftop solar for NEM customers.¹⁷ By way of example but not limitation, the Public Staff concluded that the average bill for the top quartile of NEM customers would increase by as much as 118.53% under the proposed NEM tariffs.¹⁸

- In their initial comments, other intervenors made a compelling argument that the proposed NEM tariffs are too complicated and vague, which will make it impossible for solar customers to project savings.¹⁹

- The proposed NEM tariffs treat legacy customers unfairly by significantly impairing the value proposition under which such legacy customers undertook the long-term investment of a rooftop solar system.²⁰

- The proposed NEM tariffs discriminate against NEM solar customers and otherwise violate PURPA.²¹

III. The Present Surreply Comments

As noted, NC WARN *et al.* timely filed Joint Reply Comments on May 12, 2022. A few hours later, a Joint Motion for Additional Extension of Time for Reply

¹⁵ NCSEA *et al.*’s Initial Comments, Exhibit A, p. 6, footnote 7.

¹⁶ NC WARN *et al.*’s Reply Comments, pp. 14-18.

¹⁷ *Id.* at 18-22.

¹⁸ The Public Staff’s Initial Comments, p. 32.

¹⁹ NC WARN *et al.*’s Reply Comments, pp. 22-23.

²⁰ *Id.* at 23-24.

²¹ *Id.* at 24-26.

Comments was filed by the Companies, Sundance Power Systems, Inc., Southern Energy Management, Inc., and Yes Solar Solutions. On May 13, 2022, the Commission entered an *Order Granting Extension of Time to File Reply Comments and Allowing Parties to File Responsive Comments*. In the said Order, the Commission provided the parties to the above-captioned docket an opportunity “to file further responsive comments” by May 27, 2022.²²

Pursuant to the Commission’s *Order Granting Extension of Time to File Reply Comments and Allowing Parties to File Responsive Comments*, NC WARN *et al.* files the present Surreply Comments.

INDEX OF ATTACHMENTS TO JOINT SURREPLY COMMENTS

The following is a list of the attachments filed contemporaneously with these Surreply Comments:

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|----------------------|--|
| <u>Attachment A:</u> | Email from the Companies, Re: Rate Design Study Working Groups, June 4, 2021; |
| <u>Attachment B:</u> | PowerPoint Presentation by NC WARN and Appalachian Voices During the Rate Design Study, July 29, 2021; |
| <u>Attachment C:</u> | The Companies’ Response to NC WARN’s Data Request No. 2-2; and |
| <u>Attachment D:</u> | Table 2 to Bill Powers’ Reply Report, Re: Omissions from the Companies’ Cost-Benefit Analysis. |

²² *Order Granting Extension of Time to File Reply Comments and Allowing Parties to File Responsive Comments*, NCUC Docket No. E-100, Sub 180, May 13, 2022, p. 2.

ARGUMENT

The following constitutes a discussion of the legal and evidentiary deficiencies with the Companies' proposed NEM tariffs arising out of the reply comments filed by various parties to the above-captioned docket. Due to space limitations, it was not possible to respond to every contested issue mentioned during reply comments. The failure to address any certain issue should not be considered as agreement.

I. **The Commission Should Ignore the Companies' *Ad Hominem* Attacks and Focus on the Issues.**

Unfortunately, the Companies' Reply Comments dedicated substantial space to meritless personal attacks against NC WARN. For instance, the Companies claimed that NC WARN *et al.* "introduce[d] confusion into this proceeding by providing an incomplete quote" of N.C. Gen. Stat. § 62-126.44(b).²³ Through such deception, the Companies claimed, "the NC WARN Parties argue that this [statutory] language requires the Companies to maintain 'flat rate' tariffs for NEM customers."²⁴ According to the Companies, NC WARN *et al.* omitted the following clause from the statute: "net metering retail customer pays its full fixed cost of service."²⁵

The Companies' allegation is incorrect. Here is a cut-and-pasted screenshot from NC WARN *et al.*'s Initial Comments, which clearly includes the very language that the Companies accuse NC WARN *et al.* of hiding:²⁶

²³ The Companies' Reply Comments, p. 35.

²⁴ *Id.*

²⁵ *Id.*

²⁶ NC WARN *et al.*'s Initial Comments, p. 7 (blue and red emphasis added).

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.*

As any reader can plainly see, the first paragraph of NC WARN *et al.*'s first argument—indeed, the exact same argument into which the Companies accuse NC WARN *et al.* of injecting "confusion"—included a complete quotation to the applicable statutory provision.

This type of baseless *ad hominem* was a prominent theme within the Companies' Reply Comments. Obviously the Commission will look past personal attacks and concentrate on the issues. However, NC WARN *et al.* urges the Commission to consider that the Companies' baseless personal attacks might reflect a desire to detract from the substantive issues—indeed, close examination of the issues reveals that the Companies' Joint Application lacks merit.

II. House Bill 589 Prohibits the Companies' "One Size Fits All" Approach to NEM.

The Companies have proposed a "one size fits all" approach to NEM. For instance, the Companies' Joint Application would force all NEM customers onto a TOU rate with CPP, thereby eliminating all flat-rate NEM customers.²⁷ As discussed in NC WARN *et al.*'s Joint Initial Comments, this "one size fits all" approach is particularly noxious given that the Companies' TOU rate structure is terribly disadvantageous to rooftop solar *and* unsupported by the evidence.²⁸

Moreover, NC WARN *et al.*'s Initial Comments established that this uniform approach to NEM reform violates House Bill 589,²⁹ which explicitly requires that the "Commission shall establish net metering rates under all tariff designs."³⁰ Since residential customers are now served under a flat-rate tariff, the Companies are statutorily mandated to provide a NEM option for that tariff. The Companies' effort to eliminate an entire class of customers—namely, flat-rate NEM customers—violates this mandate of House Bill 589.

In their Reply Comments, the Companies provide the following defense of their "one size fits all" NEM tariff proposal:

H.B. 589 mandates that "[t]he 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.G.S. § 62-126.4(b). The

²⁷ For instance, DEC's proposed Residential Solar Choice rider states that "Customers receiving service under this Rider must be served under a residential rate schedule with time of use (TOU) and critical peak pricing (CPP)" Joint Application of DEC & DEP for Approval of NEM Tariffs, NCUC Docket No. E-100, Sub 180, Ex. No. 1, pdf p. 30.

²⁸ NC WARN *et al.*'s Initial Comments, pp. 32-36.

²⁹ *Id.* at 7-9.

³⁰ N.C. Gen. Stat. § 62-126.4(b) (emphasis added).

plain language of this provision 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 by ensuring each customer “pays its full fixed cost of service.”³¹

At the outset, it should be pointed out that the Companies inaccurately summarized N.C. Gen. Stat. § 62-126.4(b). Contrary to the Companies’ above-quoted summary, that statute does **not** say “each tariff established by the Commission pursuant to H.B. 589.”³² The statute actually says, “**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.”³³ The statute is clearly mandating that a NEM rate be established for “all tariff designs.” If the Companies are correct that the General Assembly is merely requiring that customers pay their cost-of-service for any NEM rate adopted pursuant to House Bill 589, then the Commission could comply with the statute by simply taking no action at all. Surely that is not what the statute was designed to allow.

In fact, the Companies’ argument boils down to the following: the words “pays its full fixed cost of service” somehow overshadow or eliminate the words “under all tariff designs.” The Companies’ argument is erroneous as a matter of law. If the General Assembly wanted N.C. Gen. Stat. § 62-126.4(b) to merely require all NEM customers to pay their full fixed cost of service, the General Assembly could have easily accomplished this purpose without including the words

³¹ The Companies’ Reply Comments, p. 35.

³² *Id.*

³³ N.C. Gen. Stat. § 62-126.4(b) (emphasis added).

“under all tariff designs.” To illustrate this point, here is what the pertinent statutory provision would state if the words “under all tariff designs” were excised:

The Commission shall establish net metering rates
[excised words here] that ensure that the net metering
retail customer pays its full fixed cost of service.

The only difference between the actual statute and the above hypothetical sentence is the removal of the words “under all tariff designs,” yet the above hypothetical sentence has the exact same meaning being proposed by the Companies.

But that is **not** what the statute states. Instead, the pertinent statute, N.C. Gen. Stat. § 62-126.4(b), states as follows:

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.³⁴

In other words, the Companies’ recommended interpretation of House Bill 589 reads the words “under all tariff designs” right out of the statute. In so doing, the Companies have violated a cardinal rule of statutory construction: “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 statute meaningless.”³⁵

Under the Companies’ proffered interpretation of N.C. Gen. Stat. § 62-126.4(b), the words “under all tariff designs” have no meaning whatsoever. Hence,

³⁴ N.C. Gen. Stat. § 62-126.4(b) (emphasis added).

³⁵ *Lunsford v. Mills*, 367 N.C. 618, 628, 766 S.E.2d 297, 304 (2014) (internal quotation marks omitted).

the Companies' position should be rejected. As required by mandatory principles of statutory construction, the Commission should give meaning to every word of the statute, including the requirement that the "Commission shall establish net metering rates under all tariff designs."

The Companies may argue that the "Bridge Rate" proposed in the May 19, 2022 "Stipulation" overcomes these legal deficiencies. To the contrary, the Bridge Rate involves a short-term 4-year eligibility period and imposes annual participation caps.³⁶ Further, the Bridge Rate largely terminates if the Smart Saver incentive is approved by the Commission.³⁷ Hence, the Bridge Rate is both temporary and conditional and is therefore completely insignificant in comparison to the long-term 10-year NEM tariffs proposed in the Companies' Joint Application.³⁸

House Bill 589, properly interpreted, prohibits the Companies' proposal to force all customers onto a TOU rate structure with CPP. Hence the Companies should be required to propose a NEM arrangement for "all tariff designs."

III. House Bill 589 Requires a Commission-led Cost-Benefit Analysis, Including a Value of Solar Study.

NC WARN *et al.*'s Joint Initial Comments argued that both the legislative intent and plain language of House Bill 589 require that the Commission lead an independent cost-benefit analysis into customer-sited generation. The chief author

³⁶ Stipulation, ¶¶ 7, 10.

³⁷ *Id.* ¶ 13.

³⁸ The Companies' Joint Application, p. 13.

of House Bill 589, Rep. John Szoka (R-Cumberland), was interviewed and characterized as follows in an article appearing in *Energy News Network*:

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.”³⁹

In their Reply Comments, the Companies do not grapple—or address in any way—the legislative intent behind House Bill 589. Nor could they: the General Assembly clearly intended that “the fox” would not be placed “in charge of the hen house.” Instead, the Companies’ Reply Comments stated only the following:

To be clear, H.B. 589 requires that “each **electric public utility** shall file for Commission approval revised net metering rates for electric customers.” N.C.G.S. § 62-126.4(a) (emphasis added). H.B. 589 mandates that “[t]he **Commission** shall establish net metering rates.” N.C.G.S. § 62-126.4(b) (emphasis added). Although H.B. 589 clearly tasks the utilities with filing, and the Commission with approving NEM tariffs, H.B. 589 does not task a specific party with the investigation of the costs and benefits of customer-sited generation.⁴⁰

Apparently, the Companies’ sole argument is that the pertinent statute empowers the “public utility” to “file for Commission approval revised net metering rates.” The Companies miss the point. The issue is not who should “file” revised

³⁹ 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).

⁴⁰ The Companies’ Reply Comments, p. 6 (emphasis in original).

NEM rates. Instead, the issue is who should perform the mandatory “investigation of the costs and benefits of customer-sited generation.”⁴¹

As described in NC WARN *et al.*’s Joint Initial Comments, nearly every aspect of this statute requires that the Commission, not the Companies, take lead on the establishment of new NEM tariffs. For instance, the title of the statute is, “Commission to establish net metering rates.”⁴² Subsection (a) of the statute states that “Commission approval” is required.⁴³ Subsection (b) states that “[t]he Commission shall establish net metering rates.”⁴⁴ 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.⁴⁵

The words “investigate” and “investigation” are used repeatedly throughout the Public Utilities Act (the “Act”), and in each instance, it is clear that the investigating authority is a third party such as the Commission or the Public Staff. For instance, the Act provides that “[t]he Commission shall from time to time visit the places of business and investigate the books and papers of all public utilities,”⁴⁶

⁴¹ N.C. Gen. Stat. § 62-126.4(b) (emphasis added).

⁴² N.C. Gen. Stat. § 62-126.4 (emphasis added).

⁴³ *Id.* § 62-126.4(a) (emphasis added).

⁴⁴ *Id.* § 62-126.4(b) (emphasis added).

⁴⁵ NC WARN *et al.*’s Initial Comments, 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.

⁴⁶ N.C. Gen. Stat. § 62-34(a).

and furthermore, the Act empowers the Commission to “investigate and examine the condition and management of public utilities.”⁴⁷ An important principle of construction is that, in general, statutory provisions “must be construed consistently with other provisions of the” same statutory act.⁴⁸ Consistently with the remainder of the Act, the word “investigation” in House Bill 589 should be interpreted as requiring that the Commission conduct the investigation.

It is difficult to believe that the General Assembly, in selecting the word “investigation,” intended for the Companies to investigate themselves. Obviously, the Companies would have an unconscious bias toward minimizing the benefits and amplifying the costs of rooftop solar. The word “investigation,” given its natural, plain meaning, indicates that the investigation should be performed by a third party, namely the Commission. As stated by the chief author of House Bill 589, Rep. Szoka, “We’re not putting the fox in charge of the hen house here.”

IV. The Rate Design Stakeholder Process Cannot Satisfy the Requirement of an “Investigation” of Rooftop Solar.

In their Reply Comments,⁴⁹ the Companies claimed that the NEM portion of the Rate Design Study stakeholder process satisfies the requirement of an “investigation of the costs and benefits of customer-sited generation.”⁵⁰ This

⁴⁷ N.C. Gen. Stat. § 62-37(a).

⁴⁸ *Jackson v. Charlotte Mecklenburg Hosp. Auth.*, 238 N.C. App. 351, 358, 768 S.E.2d 23, 28 (2014) (“Further, N.C. Gen. Stat. § 132-1.3 must be construed consistently with other provisions of the Public Records Act.” (quoting *Rhyne v. K-Mart Corp.*, 358 N.C. 160, 188, 594 S.E.2d 1, 20 (2004) (holding that “this Court does not read segments of a statute in isolation”; “[r]ather, we construe statutes *in pari materia*, giving effect, if possible, to every provision”))).

⁴⁹ *E.g.*, the Companies’ Reply Comments, p. 2.

⁵⁰ N.C. Gen. Stat. § 62-126.4(b).

argument was anticipated and rebutted in NC WARN *et al.*'s Joint Initial Comments⁵¹ and Joint Reply Comments.⁵² Further, the following additional intervenors likewise reject the Companies' argument that the Rate Design Study was an "investigation":

- The Attorney General's Office (the "AGO");⁵³
- 350 Triangle, 350 Charlotte, and the North Carolina Alliance to Protect Our People and the Places We Live (collectively, "350 Triangle *et al.*");⁵⁴
- Sundance Power Systems, Inc., Southern Energy Management, Inc., and Yes Solar Solutions (collectively, the "Rooftop Installers");⁵⁵ and
- the Environmental Working Group ("EWG").⁵⁶

As aptly stated by the AGO, "While the Comprehensive Rate Design Study investigated the costs of customer-sited generation, **it did not analyze potential benefits of customer-sited generation.**"⁵⁷

In the face of widespread agreement that an informal stakeholder process cannot meet the definition of "investigation," the Companies' Reply Comments mount several failed defenses of the Rate Design Study. For instance, the Companies state:

⁵¹ NC WARN *et al.*'s Initial Comments, pp. 17-22.

⁵² NC WARN *et al.*'s Reply Comments, pp. 5-7.

⁵³ The AGO's Initial Comments, p. 1 ("The AGO believes that it would be prudent for the Commission to delay reaching a decision on these revised [NEM] rates until a **sufficient investigation** has been done regarding the costs and benefits of customer-sited generation—an investigation that may not be possible until later in the Carbon Plan process." (emphasis added)).

⁵⁴ 350 Triangle *et al.*'s Initial Comments, p. 4.

⁵⁵ The Rooftop Installers' Initial Comments, pp. 1-3.

⁵⁶ EWG's Initial Comments, pp. 8-11.

⁵⁷ The AGO's Initial Comments, pp. 3-4 (emphasis added).

While the discussion of Fast Track topics might be considered sooner than other topics, there was no set end date or abbreviated timeline for these conversations. The Fast Track designation simply reflects the priority of consideration, not a truncated timeline.⁵⁸

The Companies' characterization of the Rate Design Study is inaccurate. For instance, on June 4, 2021, the Companies sent all participants of the Rate Design Study an email describing the "Fast Track" working group, which included NEM, as follows: "Topics discussed in the Fast Track Working Group are ones that may be developed and implemented on an accelerated timetable."⁵⁹

Hence, prior to the Companies' Reply Comments, the Companies were clear that NEM, as part of the Fast Track working group, may be "developed . . . on an accelerated timetable." It is difficult to understand the Companies' newly altered position on the Fast Track portion of the Rate Design Study.

Indeed, both NC WARN and Appalachian Voices repeatedly expressed concerns to the Companies and the third-party facilitator about the accelerated timeframe for NEM discussions during the Rate Design Study.⁶⁰ Despite these complaints, the NEM topic was subject to discussion over a mere six (6) weeks.

The electric vehicles ("EV") component of the Rate Design Study serves as a stark contrast to NEM. As the Commission is aware, the EV topic was also part of the Fast Track working group.⁶¹ However, pursuant to the Commission's Order

⁵⁸ The Companies' Reply Comments, p. 2 (emphasis added).

⁵⁹ **Attachment A**, Email from the Companies on June 4, 2021, p. 1 (emphasis added).

⁶⁰ **Attachment B**, NC WARN's PowerPoint Presentation During Rate Design Study, p. 3.

⁶¹ **Attachment A**, Email from the Companies, June 4, 2021.

entered on November 24, 2020 in Docket Nos. E-2, Sub 1197 and E-7, Sub 1195, regular stakeholder meetings on EV had been ongoing since December 16, 2020. Despite this thorough stakeholder process, dating back to December 2020, the EV stakeholder meetings only recently concluded on January 28, 2022. It is unclear why NEM did not receive the same thorough treatment as EVs.

In their Reply Comments, the Companies touted the supposedly extensive dissemination of data during the Rate Design Study. To the contrary, the NEM portion of the Rate Design Study was plagued by untimely and half-hearted sharing of 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 proposed NEM tariff. 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.⁶² The Commission will recall that similar concerns about the Companies' stakeholder meetings were expressed by certain intervenors to

⁶² 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. 8-13, November 15, 2021.

the Carbon Plan docket.⁶³ The reoccurring nature of these issues lends credibility to NC WARN *et al.*'s criticisms of the Rate Design Study.

The Companies' Reply Comments accused NC WARN of squandering an opportunity to engage in a substantive policy discussion on NEM during the Rate Design Study:

61. Although the NC WARN Parties attack the stakeholder process, it should be noted that NC WARN not only participated in the process, but actually presented to the stakeholder group on July 29, 2021 (approximately four months before the Companies' application was filed in this docket). During that presentation and throughout the entire Rate Design Study process, NC WARN had the opportunity to discuss ideas and reform proposals.

62. Instead, NC WARN utilized their presentation on July 29, 2021 to complain about inclusion of NEM topics in the Fast Track process and argue that the NEM program successfully implemented by the Companies in South Carolina should not be used as a starting point in North Carolina. . . .⁶⁴

The Companies' allegation is baseless. Attached hereto as **Attachment B** is the said presentation given by NC WARN on July 29, 2021. As the Commission will see, NC WARN provided constructive feedback about the Minimum Monthly Bill,⁶⁵ the TOU windows,⁶⁶ the need for a battery storage provision,⁶⁷ the need for

⁶³ See, e.g., Order Regarding Data Inputs and Assumptions, and Scheduling Additional Update on Stakeholder Process Sufficiency, NCUC Docket No. E-100, Sub 179, March 22, 2022.

⁶⁴ The Companies' Reply Comments, p. 29.

⁶⁵ **Attachment B**, NC WARN's PowerPoint Presentation During Rate Design Study, p. 5.

⁶⁶ *Id.* at 8.

⁶⁷ *Id.* at 10.

accommodation of low-income customers,⁶⁸ and other substantive feedback. NC WARN returned to these themes repeatedly throughout the Rate Design Study. Of course, the Companies were unmoved.

The Companies' Reply Comments assert that "the vast majority of Rate Design Study participants supported the proposal."⁶⁹ This argument was anticipated and rejected in NC WARN *et al.*'s Joint Initial Comments.⁷⁰ In summary, the Companies' claim that a "vast majority" of participants agreed to the NEM proposal is possible only because six (6) stakeholder participants were signatories to the preexisting Memorandum of Understanding in South Carolina and were therefore contractually obligated to support the Companies' proposal in North Carolina.⁷¹

The Companies' Reply Comments give the impression that that Rate Design Study was a substantive discussion which evaluated costs and benefits and thereby resulted in a compromise NEM proposal for North Carolina.⁷² The evidence shows otherwise. As the Commission is aware, the Rate Design Study occurred after the South Carolina Public Service Commission approved a Memorandum of Understanding governing the Companies' NEM tariffs in South Carolina. If the Rate Design Study was a genuine investigation, one would expect some changes to the South Carolina model.

⁶⁸ *Id.* at 12.

⁶⁹ The Companies' Reply Comments, p. 4.

⁷⁰ NC WARN *et al.*'s Initial Comments, pp. 21-22.

⁷¹ *Id.* at 21.

⁷² *E.g.*, the Companies Reply Comments, p. 13 ("The Rate Design Study Revealed the Potential for NEM Customer to Pay Less Than Their Full Fixed Cost of Service").

To the contrary, there is no material difference between the NEM proposal set forth in the South Carolina Memorandum of Understanding and the NEM proposal arising out of the Rate Design Study. NC WARN served the following data request upon the Companies: “Identify any changes that were made to the revised NEM tariffs developed by Duke Energy as a result of stakeholder input during the Rate Design Stakeholder process.”⁷³ In response, the Companies provided a long narrative which, at bottom, conceded that the Companies’ proposed NEM tariffs in North Carolina are virtually identical to the arrangement in South Carolina.⁷⁴

There is widespread agreement in this docket that the Rate Design Study was not a meaningful “investigation,” and NC WARN *et al.* urges the Commission to disregard any notion that the Rate Design Study meaningfully investigated “the costs and benefits of customer-sited generation.”⁷⁵

V. There Is Sufficient Time to Conduct the Statutorily Mandated “Investigation.”

NCSEA *et al.*’s Reply Comments stated the following: “SACE, Vote Solar, and NCSEA have no objection to further study of the benefits and costs of rooftop solar.”⁷⁶

However, NCSEA *et al.* expressed concern “about too much of a delay and uncertainty about future net metering rates under the terms of N.C.G.S. § 62-

⁷³ **Attachment C**, the Companies’ Response to NC WARN’s Data Request No. 2-2.

⁷⁴ *Id.*

⁷⁵ N.C. Gen. Stat. § 62-126.4(b).

⁷⁶ NCSEA *et al.*’s Reply Comments, p. 3.

126.4” if the said investigation takes too long.⁷⁷ NC WARN *et al.* understand this concern. That said, the Companies’ ambitious request for a new NEM tariff by January 1, 2023⁷⁸ is completely arbitrary and not required by House Bill 589 or any other law. The applicable statute, N.C. Gen. Stat. § 62-126.4(c), provides no deadline for the implementation of new NEM tariffs. To the contrary, that 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,”⁷⁹ and the statute does not preclude existing NEM customers from remaining on their current tariff beyond January 1, 2027. Given that NEM customers have a statutory right to retain their current tariff until January 1, 2027, there is ample time for a meaningful investigation of the costs and benefits of rooftop solar.

NCSEA *et al.*’s Reply Comments also encouraged haste because “the current residential rooftop solar rebate program authorized under the 2017 energy legislation (HB 589) concludes at the end of 2022” (the “NC solar rebate”).⁸⁰ This concern should be disregarded. As the Commission is aware, the NC solar rebate program operates under a highly competitive lottery system, and the vast majority of rooftop solar customers will not receive the NC solar rebate.⁸¹ Notably, in their

⁷⁷ *Id.*

⁷⁸ The Companies’ Joint Application, pp. 1-2.

⁷⁹ N.C. Gen. Stat. § 62-126.4(c).

⁸⁰ NCSEA *et al.*’s Reply Comments, p. 2.

⁸¹ For instance, Southern Energy Management’s website characterizes the NC solar rebate as “Very Competitive” for residential customers and “Extremely Competitive” for commercial customers. See Southern Energy Management’s Website, *NC Solar Rebate Program 2022*, <https://southern-energy.com/nc-solar-rebate/> (accessed on May 25, 2022). Similarly, Yes Solar Systems’ website states that “the Duke Solar Rebate can be somewhat difficult, especially since applications often reach the program capacity limits quickly” Yes Solar

Initial Comments, the Rooftop Installers called upon the Commission to “initiate an independent study of net metering before establishing Duke’s NEM Tariffs,”⁸² yet the Rooftop Installers expressed no concern whatsoever about the expiration of the NC solar rebate. In fact, one of the Rooftop Installers, namely Southern Energy Management, indicates on its website that the NC solar rebate is so uncertain that it is not used in cost-savings projections for potential customers: “Because the rebate cannot be guaranteed, Southern Energy Management will default to not including the rebate in your solar savings analysis.”⁸³

Accordingly, there is ample time for a meaningful investigation of the costs and benefits of rooftop solar.

VI. The Companies’ Embedded and Marginal Cost Studies Failed to Evaluate the Benefits of Rooftop Solar and Departed from the Applicable Standard of Care.

House Bill 589 required an evaluation of both the costs and benefits of rooftop solar.⁸⁴ NC WARN *et al.*’s Joint Initial Comments⁸⁵ and Joint Reply Comments⁸⁶ established that the Companies’ embedded and marginal cost studies failed to consider several important benefits of rooftop solar.

By way of example but not limitation, the Companies largely failed to consider that the installation of “NEM solar can reduce or eliminate expansion of

Systems’ Website, *Duke Solar Rebate Application Opens*, <https://yessolarsolutions.com/how-to-apply-for-the-duke-energy-solar-rebate/> (accessed on May 25, 2022).

⁸² Rooftop Installers’ Initial Comments, p. 12.

⁸³ Southern Energy Management’s Website, *NC Solar Rebate Program 2022*, <https://southern-energy.com/nc-solar-rebate/> (accessed on May 25, 2022).

⁸⁴ N.C. Gen. Stat. § 62-126.4(b).

⁸⁵ NC WARN *et al.*’s Initial Comments, pp. 12-17, 27-32.

⁸⁶ NC WARN *et al.*’s Reply Comments, pp. 8-14.

the transmission and distribution ('T&D') system that would otherwise be necessary to accommodate load growth and grid congestion at times of peak demand."⁸⁷ Moreover, the Companies failed to analyze multiple societal benefits of rooftop solar.⁸⁸ Accompanying NC WARN *et al.*'s Joint Reply Comments was a table authored by subject-matter expert Bill Powers ("Mr. Powers") summarizing the numerous omissions from the Companies' analysis.⁸⁹ For the Commission's convenience, that table is attached hereto as **Attachment D**.⁹⁰

The Companies' Reply Comments attached the pertinent embedded and marginal cost studies⁹¹ and attempted a defense of the thoroughness of the analysis.⁹² The Commission will note that the said cost studies are a mere seven (7) pages, lack a narrative description of the methodology and conclusions, omit any identification of underlying assumptions, and provide almost no recitation of data inputs. Further, the Companies admit that these studies "should be monitored and updated."⁹³ In short, the Companies' embedded and marginal cost studies are barebones and represent a halfhearted effort at ascertaining the costs and benefits of rooftop solar.

In their Reply Comments, the Companies assert that it is unnecessary to comply with the National Energy Screening Project's *National Standard Practice*

⁸⁷ NC WARN *et al.*'s Initial Comments, Attachment A, Powers' Report, p. 8.

⁸⁸ NC WARN *et al.*'s Reply Comments, pp. 8-13

⁸⁹ *Id.*, Attachment A, Powers' Reply Report, p. 6.

⁹⁰ Powers' Reply Report should be consulted for explanations and supporting citations for the said table attached hereto as **Attachment D**. See NC WARN *et al.*'s Reply Comments, Attachment A, Powers' Reply Report, pp. 5-6.

⁹¹ The Companies' Reply Comments, pp. 6-13.

⁹² The Companies' Reply Comments, Exhibit B.

⁹³ The Companies' Reply Comments, p. 8.

Manual for Benefit-Cost Analysis of Distributed Energy Resources (“NSPM-DER”) because, supposedly, “that standard has been considered or introduced in 40 states and only been applied in three states.”⁹⁴ The Companies’ argument is misplaced for several reasons. First, the current NSPM-DER was promulgated in 2020,⁹⁵ and therefore, its quick adoption by three (3) states would be relatively promising. However, the Companies’ tally is inaccurate: in fact, the NSPM-DER has been adopted by eight (8) states, which is an impressive clip for such a new standard.⁹⁶ Unsurprisingly, in states adopting the NSPM-DER, the full benefits of rooftop solar were analyzed and the resulting NEM tariffs were more favorable to solar.⁹⁷

Instead of the NSPM-DER, the Companies advocate use of the principles endorsed by the National Association of Regulatory Utility Commissioners (“NARUC”).⁹⁸ However, the NARUC manuals cited by the Companies are approximately thirty (30) years old,⁹⁹ pre-date NEM solar, and therefore fail to provide guidance on the suite of beneficial attributes that should be considered in analyzing the costs and benefits of rooftop solar. The better approach is to apply

⁹⁴ *Id.* at 9.

⁹⁵ EWG’s Initial Comments, Attachment C.

⁹⁶ NESP Website, NSPM References, <https://www.nationalenergyscreeningproject.org/national-standard-practice-manual/state-references/> (accessed on May 25, 2022).

⁹⁷ *E.g.*, PV Magazine, *In a Big Win for Solar, Arkansas Judge Upholds Full Rate Net-Metering and Denies a Grid Fee*, <https://pv-magazine-usa.com/2022/05/23/in-a-big-win-for-solar-arkansas-judge-upholds-full-rate-net-metering-and-denies-a-grid-fee/> (accessed on May 25, 2022).

⁹⁸ The Companies’ Reply Comments, p. 8.

⁹⁹ *Id.* at 8, footnote 6 (*citing* to NARUC manuals promulgated in 1992 and 1994).

the NSPM-DER, which is the preferred standard and specifically designed for distributed energy resources such as rooftop solar.

The NSPM-DER recommends consideration of the societal benefits of rooftop solar.¹⁰⁰ In response, the Companies' Reply Comments urged the Commission to not consider societal benefits.¹⁰¹ In making this request, the Companies completely ignored the following:

- Governor Cooper's Executive Order No. 246 recommended that the Commission consider the federal social cost of greenhouse gas emissions in its decision-making processes;¹⁰²
- Governor Cooper's Executive Order No. 80 directed the development of a Clean Energy Plan, including certain greenhouse gas emissions reduction goals;¹⁰³
- The Public Utilities Act expressly declares that it is "the policy of the State of North Carolina . . . [t]o encourage and promote harmony between public utilities, their users and **the environment**";¹⁰⁴ and
- House Bill 951 "requires implementation of a carbon emissions reduction plan for the State's public utilities."¹⁰⁵

Therefore, the Companies' argument that the societal benefits of rooftop solar should be disregarded is inconsistent with North Carolina public policy.

¹⁰⁰ NC WARN *et al.*'s Initial Comments, pp. 12-13.

¹⁰¹ *Id.* at 12.

¹⁰² *Executive Order No. 246*, January 7, 2022, p. 3, at <https://governor.nc.gov/media/2907/open> (accessed on May 6, 2022) (emphasis added).

¹⁰³ *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).

¹⁰⁴ N.C. Gen. Stat. § 62-2(a)(5) (emphasis added).

¹⁰⁵ Joint Application, p. 7.

Moreover, the Companies criticized Mr. Powers' conclusion that "the Companies' cost-shift analysis is flawed because of [its] emphasis upon residential NEM customers to the exclusion of an examination of the cost-shifts caused by other customer classes."¹⁰⁶ According to Mr. Powers, by focusing exclusively on this single category of cost shift, the Companies failed "to assess the alleged cost-shift between NEM customers as a whole (both residential NEM and non-residential NEM customers), and non-NEM residential and non-residential customers."¹⁰⁷

In response, the Companies defend their focus on residential customers because "residential customers are the primary driver of cross-subsidies on the Companies' system resulting from NEM."¹⁰⁸ Contrary to the Companies' approach, House Bill 589 does not focus upon residential customers but instead requires an analysis of the "fixed cost of service" for "retail customer[s]" in general.¹⁰⁹ The Companies should be required to present a ledger for both residential and non-residential NEM customers, and it should then be up to the Commission, not the Companies, to determine which customer class is the "primary driver of cross-subsidies." To date, the Commission has not been presented with such data, and it is therefore impossible for the Commission to make an independent determination of which customer class, if any, is causing a cost shift.

¹⁰⁶ NC WARN *et al.*'s Initial Comments, p. 28.

¹⁰⁷ NC WARN *et al.*'s Initial Comments, Attachment A, Powers' Report, p. 5.

¹⁰⁸ The Companies' Reply Comments, p. 16.

¹⁰⁹ N.C. Gen. Stat. § 62-126.4(b).

Instead, the Companies ask the Commission to accept on blind faith that residential customers are the “primary driver of cross-subsidies.” This is particularly unfair given that, according to Mr. Powers, the Companies’ residential customers are already “paying 25 percent more than their full COS.”¹¹⁰

Finally, the Companies’ Reply Comments failed to address or even acknowledge NCSEA *et al.*’s important finding that “there are several benefits of distributed renewable generation that DEC and DEP have not quantified,” including “avoided costs for carbon emissions and fuel hedging benefits, which combined could add approximately 4 to 5 cents per kWh to the benefits.”¹¹¹ In short, the Companies’ embedded and marginal cost studies are deeply flawed and should be rejected.

VII. The Stipulation Between the Companies and the Rooftop Installers Does Not Rectify the Serious Defects with the Companies’ Joint Application.

On May 19, 2022, the Rooftop Installers and the Companies filed a “Stipulation” which proposed a “Bridge Rate” for certain NEM customers. Any appearance of consensus cast by the Stipulation is completely illusory because the Stipulation is non-binding: “The Stipulation reflects certain non-binding understandings reached by the Stipulating Parties to advance NEM reform in North Carolina in accordance with H.B. 589, subject to Commission approval.”¹¹² Accordingly, the Stipulation should be afforded no weight by the Commission.

¹¹⁰ NC WARN *et al.*’s Initial Comments, Attachment A, Powers’ Report, p. 4.

¹¹¹ NCSEA *et al.*’s Initial Comments, Exhibit A, p. 6, footnote 7.

¹¹² Stipulation, ¶ 6.

Additionally, intervenors to the above-captioned docket—with exception of the Public Staff—have not been provided a meaningful opportunity to study the non-binding Stipulation. The deadline for the present filing is May 27, 2022. As noted above, the Stipulation was not filed and served until May 19, 2022—in other words, NC WARN *et al.* was provided a mere eight (8) days to review and analyze the Stipulation and prepare comments on the same. Of course, this short deadline left no opportunity to conduct discovery concerning the effects of the proposed Bridge Rate.

The treatment given to the Public Staff was much more fair, reasonable and considerate than that granted to NC WARN *et al.* According to the Public Staff's Letter In Lieu of Comments, filed on May 20, 2022, "Duke contacted the Public Staff to discuss the broad terms of the Stipulation and to explain the function and purpose of the 'bridge rate'" ¹¹³ The Public Staff was seemingly given sufficient advanced notice that it could hold an "initial conversation with Duke," and then pose "several follow-up questions and meet with Duke a second time to clarify any issues." ¹¹⁴ The Companies have not explained why the Public Staff was entitled to such a generous opportunity for study whereas other intervenors, such as NC WARN *et al.*, were allotted a mere eight (8) days.

Interestingly, the Stipulation states that it was "agreed and stipulated this 13th day of May, 2022," which is six (6) days before the Stipulation was actually filed and served. ¹¹⁵ It is difficult to understand why the Stipulation was executed

¹¹³ The Public Staff's Letter In Lieu of Comments, p. 1.

¹¹⁴ *Id.*

¹¹⁵ Stipulation, p. 10.

on May 13, 2022 but not filed and served until May 19, 2022. Certainly all parties would have benefited from studying the Stipulation beginning on May 13, 2022.

Despite lacking an opportunity to meaningfully evaluate and conduct discovery over the Stipulation, several substantive issues should be noted. For instance, the Stipulation does not replace or change the NEM tariffs proposed in the Companies' Joint Application. To the contrary, the Bridge Rate proposed in the Stipulation is an *alternative* to the Companies' proposed NEM tariffs.¹¹⁶ Hence, NC WARN *et al.*'s foregoing criticisms of the Companies' proposed NEM tariffs remain unaltered.

Further, the Bridge Rate proposed in the Stipulation involves a short-term 4-year eligibility period¹¹⁷ and is subject to annual participation caps.¹¹⁸ Moreover, the Bridge Rate largely terminates if the Smart Saver incentive is approved by the Commission.¹¹⁹ Simply put, the Bridge Rate is a minor adjunct to the long-term 10-year NEM tariffs proposed in the Companies' Joint Application.¹²⁰

Further, treatment of legacy customers is much worse in the Stipulation than in the original Joint Application. In both, legacy customers may remain on their current NEM tariff until January 1, 2027. The Joint Application offered an additional option from 2027 to 2037, which it called an "alternative NEM rate option." That option is similar to the Bridge Rate in the Stipulation. However, in the Stipulation,

[Current c]ustomers may remain on the Proposed Bridge Rate for 15 calendar years after the date on

¹¹⁶ *Id.* ¶ 7.

¹¹⁷ *Id.*

¹¹⁸ *Id.* ¶ 10.

¹¹⁹ *Id.* ¶ 13.

¹²⁰ The Companies' Joint Application, p. 13.

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, 2027.**¹²¹

Thus, the earlier a customer installed solar, the fewer years they can remain on the Bridge Rate. Customers who installed solar in 2011 or earlier would receive no benefit from the Bridge Rate at all. They would have to go directly onto the NEM TOU tariff in 2027, with no bridge at all, whereas the terms of the original Joint Application would have allowed them to stay on a modified NEM arrangement until 2037.

Finally, the Stipulation, in addition to being non-binding, is nonunanimous. As discussed in NC WARN *et al.*’s Initial Comments,¹²² 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 parties in light of all the evidence presented.”¹²³ In fact, the N.C. Supreme Court has cautioned that 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 that utility to prove affirmatively that the proposed rates are just and reasonable.”¹²⁴ In addition to the

¹²¹ Stipulation, ¶ 8 (emphasis added).

¹²² NC WARN *et al.*’s Initial Comments, pp. 36-38.

¹²³ *State ex rel. Utilities Comm’n v. Carolina Util. Customers Ass’n*, 348 N.C. 452, 466, 500 S.E.2d 693, 703 (1998).

¹²⁴ *Id.* at 464, 500 S.E.2d at 702.

Stipulation, this same scrutiny should be applied to the MOU filed with the Companies' Joint Application.

CONCLUSION

The Companies' proposed NEM tariffs violate House Bill 589 and are unsupported by the evidence. For the reasons discussed herein, as well as within NC WARN *et al.*'s Joint Initial Comments and Reply Comments, the Commission should reject the Companies' Joint Application. As required by House Bill 589, the Commission should lead a cost-benefit analysis of NEM 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 27th day of May, 2022.

/s/ Matthew D. Quinn

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*Attorney for NC WARN, NCCSC &
Sunrise Durham*

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 27th day of May, 2022.

/s/ Matthew D. Quinn

Matthew D. Quinn

*Attorney for NC WARN, NCCSC &
Sunrise Durham*

Attachment A

Email from the Companies, Re: Rate Design Study
Working Groups, June 4, 2021

From: RateReview <RateReview@duke-energy.com>
Sent: Friday, June 4, 2021 1:06 PM
To: RateReview
Subject: Invitation: Rate Design Study Working Groups



An Invitation For You

Rate Design Study Working Groups

Duke Energy is looking for your input on a variety of rate design topics!

Duke Energy (Duke), at the direction of the North Carolina Utilities Commission, is embarking on a comprehensive Rate Design Study to ensure that its rates in the Carolinas align with evolving customer needs and the public interest. This process includes broad stakeholder engagement through a variety of channels, including a series of working groups. The working groups will focus on exploring issues, developing ideas, and making recommendations on specific rate design approaches. A Duke representative will chair each working group, and ICF will facilitate the working group session. Duke is seeking **volunteers** to participate in the working groups, which are outlined in detail below. If selected, participants will be expected to engage in the following ways:

1. Attend all sessions for your selected working group
2. Engage in collaborative, solutions-oriented discussions with fellow members
3. Report out on working group progress at three quarterly stakeholder Forums

In some cases, effort may be requested outside of the working group sessions, and subgroups may be formed as needed.

Are you interested in participating in any of these working groups? If so, please register by following the link, [Register Here](#), by Friday, June 11th and indicate your preference(s). Volunteers may participate in more than one working group. However, we request that each organization/company provide no more than two (2) participants to any one working group, to ensure that we can accommodate a broad range of perspectives while keeping the groups manageable and productive.

Working Group Descriptions

Working Group 1: Fast Track Topics

Description

This working group will discuss existing and potential future rates that support innovation and meet the evolving needs of customers in DEC/DEP service territories. **Topics discussed in the Fast Track Working Group are ones that may be developed and implemented on an accelerated timetable;** this could include the possibility of implementation outside of a DEP/DEC rate case, although the suitability for that will need to be considered on a case-by-case basis. Topics within scope may include, but are not limited to:

- TOU Refresh
- Net metering
- Electric vehicles
- On-tariff financing

Anticipated Expectations/Commitment

1. Participants will meet virtually for two 90-minute sessions, likely one each in **June and August 2021**. During these sessions, working group members will consider the rate options currently available within and beyond DEC/DEP, propose rate modifications, and develop new rate solutions.
2. There is potential for additional meetings of targeted subgroups in addition to the full working group sessions.
3. At the conclusion of the process, the working group will recommend rate design options that Duke should consider incorporating into its Rate Design Study.

Working Group 2: Hourly Pricing and Economic Development**Description**

This working group will discuss existing and potential future dynamic rates for customers in DEC/DEP service territory.

Topics within scope may include, but are not limited to:

- Hourly pricing
- Economic development riders and programs

Anticipated Expectations/Commitment

1. Participants will meet virtually for two 90-minute sessions, likely one each in **July and September 2021**. During these sessions, working group members will consider the dynamic rate options currently available within and beyond DEC/DEP, propose rate modifications, and develop new dynamic rate solutions.
2. At the conclusion of the process, the working group will recommend rate design options that Duke should consider incorporating into its Rate Design Study.

Working Group 3: Residential Rates**Description**

This working group will discuss existing and potential future rates for residential customers in DEC/DEP service territory.

Topics within scope may include, but are not limited to:

- Evaluation of existing residential tariffs
- Rate availability
- Further segmentation of rates (e.g. all-electric rates)
- Consideration of new dynamic features and minimum bills
- Other new rate designs

Anticipated Expectations/Commitment

1. Participants will meet virtually for four 90-minute sessions, likely beginning in **August and concluding in December 2021**. During these sessions, working group members will set goals for the group, explore relevant rate case studies from other jurisdictions, and propose and develop rate solutions.
2. At the conclusion of the process, the working group will recommend rate design options that Duke should consider incorporating into its Rate Design Study.

Working Group 4: Non-Residential Rates**Description**

This working group will discuss existing and potential future rates for non-residential customers in DEC/DEP service territory. Topics within scope may include, but are not limited to:

- Evaluation of existing non-residential tariffs
- Rate availability
- Consideration of new rate design features
- Create of new non-residential rate designs (e.g. HLF rate options)

Anticipated Expectations/Commitment

1. Participants will meet virtually for four 90-minute sessions, likely beginning in **July and concluding in December 2021**. During these sessions, working group members will set goals for the group, explore relevant rate case studies from other jurisdictions, and propose and develop rate solutions.
2. At the conclusion of the process, the working group will recommend rate design options that Duke should consider incorporating into its Rate Design Study.

Attachment B

PowerPoint Presentation by NC WARN and Appalachian Voices During
the Rate Design Study, July 29, 2021

Duke Rate Design Study, Fast Track Subgroup B, NEM Designs:

The Need for a Return to First Principles

Presentation by NC WARN
and Appalachian Voices –
July 29, 2021

Structure of the Presentation

- **The Need for a Fresh Look at Which NEM Design Makes Sense for N.C.:**
 - Matt Quinn, NC WARN
 - Bill Powers, NC WARN
- **The Perspective of Certain Constituencies Which Have Not Been Represented During Prior NEM Deliberations:**
 - Matt Wasson, Appalachian Voices
 - Jazmyne Childs, Advance Carolina
 - Jovita Lee, The Center for Biological Diversity
- **Questions**

Process Issues

- **The Inadequacy of the “Fast Track” Process for NEM:**
 - Hugely important issue
 - Complex issue
 - Insufficient time
 - Insufficient exchange of data
- **The Memorandum of Understanding in S.C. Should Have No Bearing Upon N.C.’s NEM:**
 - Important constituencies were not represented during negotiations
 - N.C. should not be dictated to by out-of-state deal making

Some Important Issues for NEM

- **Minimum Monthly Bill?**
- **Time-of-Use and Critical Peak Pricing**
- **Storage Incentive or Solar + Battery Tariff**
- **Assistance to Lower- and Fixed-Income Customers**

Minimum Monthly Bill?

- This entire concept depends upon Duke's proving that there is a cost-shift from solar customers to non-solar customers.
- Stakeholders have not received such evidence.
- Significant time would be required to evaluate and potentially counter such evidence.
- There are substantial grounds to doubt that any such cost-shift occurs.

STATE OF SOUTH CAROLINA

BEFORE THE PUBLIC SERVICE COMMISSION

DOCKET NO. 2019-182-E

In the Matter of:

South Carolina Energy Freedom Act
(H.3659) Proceeding Initiated Pursuant
to S.C. Code Ann. Section 58-40-
20(C); Generic Docket to (1)
Investigate and Determine the Costs
and Benefits of the Current Net Energy
Metering Program and (2) Establish a
Methodology for Calculating the Value
of the Energy Produced by Customer-
Generators

REBUTTAL TESTIMONY

R. THOMAS BEACH

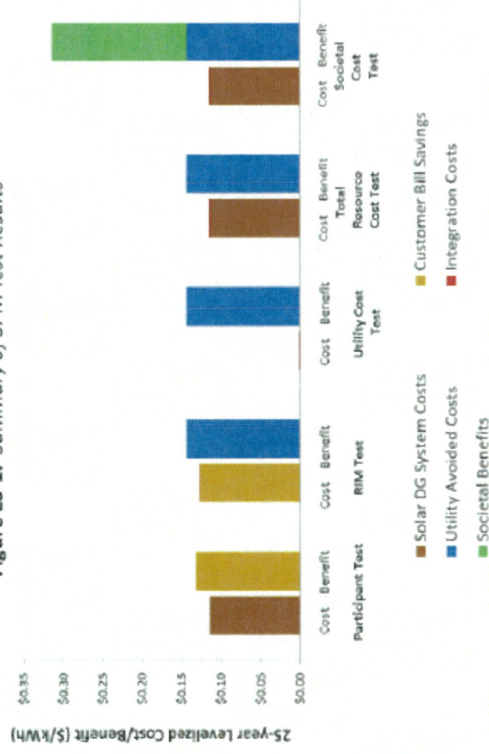
ON BEHALF OF

THE SOUTH CAROLINA COASTAL CONSERVATION LEAGUE, SOUTHERN
ALLIANCE FOR CLEAN ENERGY, UPSTATE FOREVER, VOTE
SOLAR, THE SOLAR ENERGY INDUSTRIES ASSOCIATION, and THE
NORTH CAROLINA SUSTAINABLE ENERGY ASSOCIATION

October 29, 2020

1 Everett's numbers and providing several benefits that DESC does not recognize.
 2 I then apply the full set of Standard Practice Manual (SPM) cost-effectiveness
 3 tests to residential solar on the DESC system. The following Figure ES-1 shows
 4 the results:

Figure ES-1: Summary of SPM Test Results



5 At this time, residential solar on the DESC system appears to pass all of the SPM
 6 cost-effectiveness tests. As a result, there is not presently a cost shift from solar
 7 customers to non-participating ratepayers, and distributed solar is a cost-effective
 8 resource for DESC ratepayers. There is also a small net benefit for customers
 9 who install solar, indicating that the market should continue to grow, albeit
 10 slowly, under the present net metering tariffs. Finally, there are significant,
 11 quantifiable societal benefits from distributed solar, including public health
 12 benefits from reduced air pollution and from mitigating the damages from carbon
 13 emissions.

14 I recommend that a similar analysis should be applied to the Solar Choice
 15 tariffs that DESC and the other South Carolina utilities may propose in future
 16 utility-specific proceedings pursuant to Act 62.

“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”

Time-of-Use and Critical Peak Pricing

- **Duke is an afternoon-peaking utility:**
 - DEC in 2019: 3 pm to 5 pm
 - DEP in 2019: 4 pm to 6 pm
- **Basing TOU windows upon a forward-looking model is problematic:**
 - Disadvantages solar
 - If solar is disincentivized, then load is further increased during the afternoon
 - Peak may not shift

Time-of-Use and Critical Peak Pricing cont'd

- **Discussions complicated by parallel TOU docket initiated by DEC**
- **Crucial data about peak and other related issues not yet shared during this stakeholder process**
- **Duke's load forecast model was recently rejected by the SC Public Service Commission**

Storage Incentive or Solar + Battery Tariff

- Battery storage is rapidly expanding in the U.S.:

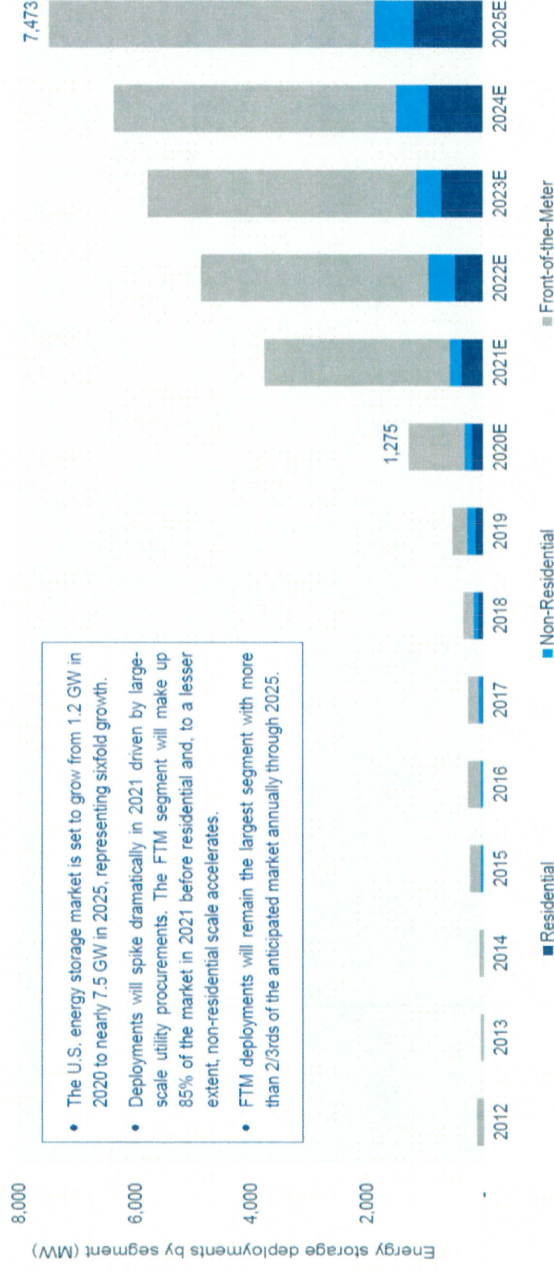
Wood Mackenzie P&R/ESA | U.S. energy storage monitor Q4 2020



U.S. energy storage deployments will reach almost 7.5 GW annually in 2025

Annual front-of-the-meter deployments are set to quadruple in 2020 versus 2019

U.S. energy storage annual deployment forecast, 2012-2025E (MW)



- Any NEM program should include provisions for storage

Storage Incentive or Solar + Battery Tariff cont'd

- **No storage incentive or solar + battery tariff has been proposed in meaningful detail**
- **Additional time is necessary to identify language regarding storage**

Assistance to Lower- and Fixed-Income Customers

- **Essential to ensure equitable access to solar**
- **No lower- or fixed-income assistance program has been proposed**
- **Additional time is necessary to identify such an assistance program**
- **Ideas for Discussion:**
 - Tariffed on-bill financing pilot?
 - Extent of funding for the program?
 - Tied to the electric meter, and not the customer

Previously Unrepresented Constituencies

- **The Perspective of Certain Constituencies
Which Have Not Been Represented During
Prior NEM Deliberations:**
 - Matt Wasson, Appalachian Voices
 - Jazmyne Childs, Advance Carolina
 - Jovita Lee, The Center for Biological Diversity

Questions?

Attachment C

The Companies' Response to NC WARN's Data Request No. 2-2

DUKE ENERGY CAROLINAS, LLC AND DUKE ENERGY PROGRESS, LLC

Request:

Identify any changes that were made to the revised NEM tariffs developed by Duke Energy as a result of stakeholder input during the Rate Design Stakeholder process.

Response:

On July 29, 2021, representatives of Sunrun and Southern Environmental Law Center presented their thoughts on net metering and features that should be considered for North Carolina. A copy of their presentation is attached.



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For example, they noted that Solar industry counterproposals to NEM reforms in the 2010s included "minimum bills," "reduce annual netting to monthly netting with excess valued at avoided cost," and "incremental step-down from full retail credit with glidepath to sustain continued market growth" and "grid toll charge[s]."

These representatives further recommended that North Carolina follow the spirit of the NEM settlement in South Carolina, which included the concepts above and critically did NOT include demand charges or "15-minute interval netting."

Attachment D

Table 2 to Bill Powers' Reply Report, Re: Omissions from
the Companies' Cost-Benefit Analysis

Table 2. Universe of NEM Benefits and Those Included in Duke Energy's NEM Cost-Shift Analysis

Universe of DER Benefits Listed in PS Initial Comments (citing to 2015 SC report)	PS Initial Comments on Whether DER Benefit Is Included in Duke's NEM Cost-Shift Calculation	NC WARN Assessment Whether DER Benefit Included in Duke's NEM Cost-Shift Calculation	DER Benefits Included in Crossborder Energy NC Study, 2013 (cited in 2015 SC report)	National Standard Practice Manual for Cost-Benefit Analysis of DERs, 2020 (Tables S3, S4, S5)
Avoided Energy	Yes	Yes (fuel cost and O&M only)	Yes	Yes
Avoided Fuel Hedge	Yes – in avoided energy	No (NCSEA comments, Ex. A, p. 6)	Yes	Yes
Avoided Capacity	Yes – under proposed NEEC	Yes – but very low (one-tenth the value estimated by Crossborder in 2013, p. 3)	Yes	Yes
Avoided Losses	Yes – in avoided energy and capacity	Yes – but low (see Crossborder 2013, p. 5)	Yes	Yes
Avoided or Deferred T&D	Yes/No	Yes/No	Yes	Yes
Avoided Ancillary Services	No	No	Yes	Yes
Market Price Reduction	No	No	Yes	Yes
Avoided Renewables Procurement	No	No	Yes	Yes
Monetized Environmental	Yes – in avoided energy (NO _x and SO ₂ only)	Yes (see Crossborder 2013, p. 5)	Yes	Yes
Avoided CO ₂ Emissions	No	No	Yes	Yes
Social Environmental	No	No	No	Yes
Security Enhance / Risk	No	No	Yes	Yes
Societal (economic/jobs)	No	No	Yes	Yes