

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. E-100, SUB 175

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	
Biennial Determination of Avoided Cost	) ORDER ESTABLISHING NET EXCESS
Rates for Electric Utility Purchases from	) ENERGY CREDIT FOR NEM TARIFF
Qualifying Facilities – 2021	)

BY THE COMMISSION: On August 13, 2021, the Commission issued an Order Establishing Biennial Proceeding, Requiring Data, and Scheduling Hearing establishing the 2021 biennial proceeding held by the North Carolina Utilities Commission pursuant to the provisions of Section 210 of the Public Utility Regulatory Policies Act of 1978 (PURPA), 18 U.S.C. § 824a-3, and the Federal Energy Regulatory Commission's (FERC) regulations implementing those provisions, which delegate responsibilities in that regard to this Commission.

In the 2021 Scheduling Order, the Commission made Duke Energy Carolinas, LLC (DEC) and Duke Energy Progress, LLC (DEP, together with DEC, Duke), DENC, WCU, and New River parties to the proceeding.

The following parties filed timely petitions to intervene that the Commission granted: the North Carolina Sustainable Energy Association (NCSEA); the Carolinas Clean Energy Business Alliance (CCEBA); the Carolina Industrial Customers for Fair Utility Rates I, II, and III (CIGFUR); Southern Alliance for Clean Energy (SACE); and Appalachian Voices. Participation of the Public Staff is recognized pursuant to N.C. Gen. Stat. § 62-15(d) and Commission Rule R1-19(e).

On November 1, 2021, pursuant to the 2021 Scheduling Order, Duke and DENC filed their proposed avoided cost rates, standard power purchase agreements (PPAs), and terms and conditions. On December 21, 2021, WCU and New River jointly made their avoided cost filings in this docket.

On November 29, 2021, DEC and DEP filed a Joint Application for Approval of Revised Net Energy Metering (NEM) Tariffs in Docket No. E-100, Sub 180 (NEM Application). Part of the NEM Application provided that customers exporting energy under the proposed NEM Tariffs would be compensated for exports at the Commission-approved avoided cost rates.

On February 24, 2022, several parties filed comments on the determination of the avoided cost rates. In its comments, the Public Staff explains that the Net Excess Energy

Credit (NEEC) is the rate at which Duke proposes to compensate customers who export power under the proposed NEM Tariffs.

On March 31, 2022, several parties filed reply comments on the determination of the avoided cost rates. NCSEA filed separate reply comments addressing the NEEC. SACE also addressed issues related to the NEEC in its reply comments.

On November 22, 2022, the Commission issued an Order Establishing Standard Rates and Contract Terms for Qualifying Facilities.

On March 10, 2023, in Docket No. E-100, Sub 180 the Commission issued an Order Approving Revised Net Metering Tariffs, which in part states that the NEEC shall be established in the Commission's biennial avoided cost proceeding.

On May 17, 2023, in Docket No. E-100, Sub 180, the Commission issued an Order Granting Extension Of Time To Develop An Online Savings Calculator And Implement Net Energy Metering Tariffs, which, in part, extended the effective date of the approved NEM tariffs to October 1, 2023.

## DISCUSSION AND CONCLUSION

In its Initial Comments, the Public Staff addresses Duke's proposed calculation for payment to customers for exporting energy. The Public Staff states that the NEM Application proposes that customers who export power be compensated at a Net Excess Energy Credit (NEEC). The Public Staff explains that the proposed NEEC would be based on the Commission-approved avoided cost rate and would consist of a two-year annualized rate, at the distribution level, for Uncontrolled Solar Generators. The Public Staff recommends that the appropriate method for calculating the avoided cost rate used for the NEEC should be decided in the avoided cost proceeding rather than in the NEM Application proceeding. In addition, the Public Staff makes three recommendations with respect to Duke's calculation of the NEEC. Public Staff Initial Comments at 3.

First, the Public Staff proposes to apply a solar profile, rather than a constant profile, to the annualized rate. Although the Public Staff acknowledges that this change will have only a minor impact on the NEEC rate, it recommends the change to reflect that solar does not deliver constant energy in all hours of the year. Public Staff Initial Comments at 4. Second, the Public Staff recommends that the Commission require Duke to calculate seasonal NEEC rates to reflect the difference in value to the electric system associated with net metering exports and to align with the seasons in the time of use rates schedules applicable to all NEM customers taking services under the proposed NEM Tariffs. Duke's proposal utilized an average annual rate calculation for the summer and non-summer seasons. Public Staff Initial Comments at 4. Finally, the Public Staff addresses the fact that Duke's proposes a two-year rate term, a rate which would be re-set every two years. The Public Staff also notes that the two-year variable rate does not include any capacity credits. The Public Staff states that it may be appropriate to use a longer-term rate, as net metered solar is included in DEC's and DEP's IRPs as a reduction to their respective load forecasts.

Acknowledging that a 10-year term may be too long, as there is no contractual obligation for the net metered facility to operate for that term, the Public Staff recommend that Duke utilize a 5-year term as the basis for the NEEC. The Public Staff also recommends that in future avoided cost filings, Duke calculate the NEEC for NEM Tariffs using its proposed modifications. Public Staff Initial Statement at 4-5.

In their Reply Comments, DEC and DEP agree with the Public Staff's recommendation to determine the NEEC in the avoided cost docket. DEC and DEP state that they support modifying their proposed method for calculation of the NEEC to reflect annualized NEEC rates based on a 5-year term, including both energy and capacity credits where applicable, and weighted using a typical rooftop solar production profile. DEC/DEP Reply Comments at 49. Duke Energy's Reply Comments Exhibit 2 presents re-calculated NEEC rates consistent with the adoption of these recommendations.

With respect to the Public Staff's recommendation to calculate seasonal rates, however, Duke states that implementing seasonal rates would have a negligible impact on the NEEC. In particular, Duke states that, as shown on Table 1 to its Reply Comments, there is only a 5% differentiation between summer and non-summer rates. Duke further notes that other parties to a Memorandum of Understanding (MOU) filed in Docket No. E-100, Sub 180 on November 29, 2021, have raised concerns to Duke about adding further complexity to the proposed NEM Tariffs.<sup>1</sup> Duke shares this concern. Given the negligible impact and the concerns of Duke and the parties to the MOU regarding the added complexity of the proposal, Duke recommends that the Commission adopt the annualized, rather than seasonal, rate option. Nevertheless, Duke agrees to calculate seasonal NEEC rates within future avoided cost proceedings for analytical purposes and to consider switching to seasonal NEEC rates if the differentiation between summer and non-summer seasons becomes sufficiently impactful to outweigh the added complexity. DEC/DEP Reply Comments at 50.

In its NEEC Reply Comments, NCSEA states that it would be premature to approve revisions to the NEEC rate design before the Commission has approved Duke Energy's NEM proposal. NCSEA NEEC Reply Comments at 2. In addition, NCSEA notes that under the MOU, Duke has flexibility to propose a solar energy profile and different monthly rates at some future point. NCSEA states that in the near term, the NEEC rates, as originally envisioned in the MOU, will be appropriate. NCSEA recommends that the Commission instruct interested parties to work together on future NEEC rate parameters to improve the accuracy of compensation to solar customers. NCSEA Reply Comments on NEEC at 4. Finally, NCSEA recommends that if the Commission agrees with the Public Staff on the need to use a longer-term rate and a seasonally changing rate upon initial adoption of Duke's NEM Proposal, the Commission should order the use of a 10-year rate, at least. NCSEA disagrees with the Public Staff's position that a 10-year rate may be too long, noting that the Public Staff did not provide any evidence that a net metered facility would not operate longer than 5 years. In particular, NCSEA notes that most

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<sup>1</sup> These settling parties include NCSEA, the Southern Environmental Law Center on behalf of Vote Solar and SACE, Sunrun, Inc., and Solar Energy Industries Association.

residential solar equipment manufacturer warranties are good for at least 10 years, solar panel performance warranties are often for 25 years, and net metered systems have a strong financial motivation to operate longer than 10 years to realize enough electricity bill savings to offset the initial investment. NCSEA Reply Comments on NEEC at 4-5.

SACE states that the Public Staff's recommendations regarding the NEEC are not necessary at this time due to the small percentage of rooftop solar generation that would be subject to the NEEC. SACE Reply Comments at 2. SACE asserts that the majority of the energy generated by rooftop solar would be consumed "behind the meter" and would not be compensated at the NEEC. Id.

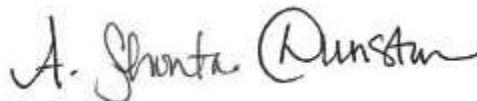
Based on the record and given that Duke's Net Metering Tariffs have been approved by the Commission, the Commission concludes that it is appropriate for Duke to calculate the NEEC, annualized over a 5-year term, including both energy and capacity credits where applicable, using a typical rooftop solar production profile. The Commission is not persuaded that a longer-term rate is necessary at this time but remains open to future discussion of this issue. The Commission notes that, while the parties disagree regarding whether it is appropriate to implement a seasonal NEEC, all parties to filing comments on the issue agree that the impact of implementing seasonal rates would be minimal at this time. Accordingly, the Commission approves the NEEC as filed in the DEC/DEP Reply Comments Exhibit 2, and further orders DEC and DEP to file for Commission approval of their respective NEECs and calculation methods in future biennial avoided cost proceedings.

IT IS, THEREFORE, ORDERED that within 15 days after the date of this Order, the DEC and DEP shall file their respective NEEC rate schedules as approved in this Order, to become effective October 1, 2023.

ISSUED BY ORDER OF THE COMMISSION.

This the 4th day of August, 2023.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in dark ink, appearing to read "A. Shonta Dunston". The signature is fluid and cursive, with the first name "A." and last name "Dunston" clearly distinguishable.

A. Shonta Dunston, Chief Clerk