



# NC SUSTAINABLE ENERGY ASSOCIATION

OFFICIAL COPY

Nov 04 2020

November 4, 2020

Ms. Kimberley A. Campbell  
Chief Clerk  
North Carolina Utilities Commission  
430 North Salisbury Street  
Raleigh, NC 27603

Re: Docket No. E-7, Sub 1214  
Duke Energy Carolinas, LLC's Application to Adjust Retail Rates, Request for an  
Accounting Order and to Consolidate Dockets  
**Partial Proposed Order of the North Carolina Sustainable Energy Association,  
North Carolina Justice Center, North Carolina Housing Coalition, Natural  
Resources Defense Council, and Southern Alliance for Clean Energy**

Dear Ms. Campbell,

Please find enclosed the Partial Proposed Order of the North Carolina Sustainable Energy Association, North Carolina Justice Center, North Carolina Housing Coalition, Natural Resources Defense Council, and Southern Alliance for Clean Energy for filing in the above-caption docket. Pursuant to Commission Rule R1-25(c), a Microsoft Word version of the partial proposed order will be emailed to [briefs@ncuc.net](mailto:briefs@ncuc.net). Please let us know if you have any questions or if there are any issues with this filing.

Respectfully yours,

/s/ Peter H. Ledford

On Behalf of the North Carolina Sustainable Energy Association

/s/ David Neal

On Behalf of the North Carolina Justice Center, North Carolina Housing Coalition,  
Natural Resources Defense Council, and Southern Alliance for Clean Energy



NC SUSTAINABLE  
ENERGY ASSOCIATION

**CERTIFICATE OF SERVICE**

I hereby certify that all persons on the docket service list have been served true and accurate copies of the foregoing Partial Proposed Order of the North Carolina Sustainable Energy Association, North Carolina Justice Center, North Carolina Housing Coalition, Natural Resources Defense Council, and Southern Alliance for Clean Energy by hand delivery, first class mail deposited in the U.S. mail, postage pre-paid, or by email transmission with the party's consent.

This the 4th day of November 2020.

/s/ Peter H. Ledford  
Peter H. Ledford  
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**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. E-7, SUB 1214

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of:	)	PARTIAL PROPOSED ORDER
Application of Duke Energy Carolinas,	)	OF THE NORTH CAROLINA
LLC for Adjustment of Rates and Charges)	)	SUSTAINABLE ENERGY
Applicable to Electric Service in North	)	ASSOCIATION, NORTH
Carolina	)	CAROLINA JUSTICE CENTER,
	)	NORTH CAROLINA HOUSING
	)	COALITION, NATURAL
	)	RESOURCES DEFENSE
	)	COUNCIL, AND SOUTHERN
	)	ALLIANCE FOR CLEAN
	)	ENERGY

BY THE COMMISSION: Based on the entire record in this proceeding, the Commission now makes the following:

**FINDINGS OF FACT**

1. It is appropriate for Duke Energy Carolinas, LLC (DEC or the Company) to implement rate designs for both residential and non-residential electric vehicle charging.

**EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 1**

The evidence supporting these findings and conclusions is contained in the testimony and exhibits of the witnesses, and the entire record in this proceeding.

Summary of EV Rate Design Testimony

The Company's application and direct testimony did not address the issue of rate design for electric vehicle (EV) charging.

In his direct testimony, North Carolina Sustainable Energy Association (NCSEA) Witness Justin R. Barnes recommended that the Commission direct the Company to establish EV-specific rates for both home charging and commercial charging applications. Tr. vol. 17, 614. Witness Barnes testified that EV-specific rates can be targeted to the unique usage patterns and flexibility of EV load to provide system benefits. Id. at 617-618. From a system perspective, Witness Barnes further testified that EV rates encourage EV owners to charge their vehicles during off-peak times, which helps mitigate the potential that EV

load could exacerbate peak demands and create additional costs. Id. at 619. Witness Barnes further testifies that, in a similar fashion, EV charging could be used to increase load during periods of high solar generation, thus playing a role in reducing the curtailment of renewable generation. Id. From a consumer perspective, witness Barnes testifies that EV-rates can produce cost savings for EV owners and operators of EV charging stations, and that these cost savings play an important role in increasing the accessibility of charging infrastructure. Id.

With regard to EV-specific rates for residential customers, witness Barnes recommends that (1) any submetering charge be limited to the cost of the additional meter, (2) the rate use a more granular time-varying pricing period than is currently offered, specifically a three-period design with shorter duration peak periods, (3) the price differential between the off-peak rate and the otherwise applicable flat rate be sufficient to produce meaningful bill savings, taking into account the incremental metering charge and a typical amount of home charging, and (4) the lowest pricing period have a duration of at least eight hours to allow ample time for low voltage charging sufficient for a reasonable length trip or commute. Tr. vol. 17, 615. Implementing these recommendations would incent EV owners to charge their vehicles during off-peak periods while also allowing them to sufficiently charge their vehicles for daily uses. Id. at 628-629.

For non-residential customers, witness Barnes recommends that (1) if submetering is utilized, any submetering charge be limited to the cost of the additional meter, (2) if submetering is not utilized, the basic facilities charge (BFC) be consistent with the rate that would otherwise apply to the account (3) the rate use a more granular time-varying pricing period than is currently offered, specifically a three-period design with shorter duration peak periods, (4) demand charges be mitigated by (i) substituting volumetric time-varying rates for on-peak demand rates, or (ii) demand charges be capped at an implied maximum volumetric rate or a percentage of the ratepayer's monthly bill, and (5) that the rate remain available to participants for ten years from the date of their enrollment. Tr. vol. 17, 615-616. Witness Barnes notes that demand charges are the largest barrier to non-residential EV charging, which includes fleet vehicle charging, and are especially problematic for DC fast charging (DCFC). Id. at 631-632. Witness Barnes recommends that the Commission substitute time-varying volumetric charges for demand charge components or establish limits or caps on demand charges. Id. at 638, 649. Witness Barnes also identifies other opportunities for mitigating the negative impact of demand charges – allowing aggregation of multiple meters for the purpose of calculating demand charges and modifying the calculation of demand charges from the monthly maximum demand to the daily maximum demand – but does not recommend that the Commission implement either of these options at this time. Id. at 638.

DEC witness Lon Huber testified that the Company recognizes that increasing adoption of EVs could provide significant system benefits. However, DEC witness Huber recommends addressing EV-specific rate design in the

context of a comprehensive rate design study. Tr. vol. 12, 290-291.

Public Staff witness Jack Floyd offered contradictory testimony, testifying that “it is appropriate for the Company to begin working on new EV rate designs now,” but also testifying that such rate design should be accomplished in a comprehensive rate design stakeholder process. Tr. vol. 18, 274-275; Tr. vol. 19, 13-16. Witness Floyd further testified that it is premature and counterproductive to redesign rates without a full understanding of the rationale for the change. Tr. vol. 18, 338.

### Discussion and Conclusions

The Commission notes that there was no disagreement among the parties regarding the need for EV-specific rates and no party offered testimony disagreeing with the substance of NCSEA witness Barnes’ recommendations for EV-specific rate design. Rather, the issue appears to be one of timing, with witness Barnes testifying that a need currently exists and that the Commission should address the need in the instant proceeding, and DEC witness Huber and Public Staff witness Floyd testifying that the need exists and that the Commission should address the need after a comprehensive rate design stakeholder process.

While the Commission appreciates Public Staff witness Floyd’s desire that no changes to rate design should be implemented before a comprehensive rate design stakeholder process is completed, the Commission is not convinced that it is appropriate to delay innovative rate offerings. While the Commission agrees with witness Floyd that it would be counterproductive to redesign rates without a full understanding of the rationale for the change, in the case of EV-specific rates the testimony of witness Barnes makes the rationale for adopting such rates clear. The Commission has previously directed that “DEC should be required to design and propose new rate structures to capture the full benefits of AML.” Order Accepting Stipulation, Deciding Contested Issues, and Requiring Revenue Reduction, 19, Docket No. E-7, Sub 1146 (June 22, 2018). The Commission reiterates its desire for the Company to begin offering new rate structures when needs and solutions have been identified.

Furthermore, the Commission shares witness Barnes’ belief that delaying the implementation of EV-specific rates until the completion of a rate design stakeholder process would be “making perfect the enemy of the good.” Tr. vol. 17, 661. The Commission does not share witness Floyd’s belief that making changes to rate design in the instant proceeding would be an obstacle to more comprehensive rate design reform. As an initial matter, it is unclear when witness Floyd’s proposed comprehensive rate design stakeholder process will be concluded, and it is unknown when the Company will file its next general rate case to incorporate the results of the stakeholder process.

In summary, the Commission finds good cause to require the Company to file proposed new EV-specific rates for both home charging and commercial charging applications, including both fleet vehicle charging and DCFC, consistent

with the recommendations of NCSEA witness Barnes within 60 days of the date of this Order. Further, the Commission finds good cause to establish an investigatory docket to receive further information and permit further discussion of EV-specific rates, lessons learned, and potential rate refinements.

IT IS, THEREFORE, ORDERED as follows:

1. That DEC shall file proposed EV-specific rates for both home charging and commercial charging applications within 60 days of the date of this Order.

2. That the Commission will, by further order, establish an investigatory docket to receive further information and permit further discussion of EV-specific rates, lessons learned, and potential rate refinements.

ISSUED BY ORDER OF THE COMMISSION.

This the \_\_\_\_ day of \_\_\_\_\_, 2020.

NORTH CAROLINA UTILITIES COMMISSION

Kim Campbell, Chief Clerk