

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-7, SUB 1146
DOCKET NO. E-7, SUB 1253

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of)	
Application of Duke Energy Carolinas, LLC, for)	ORDER APPROVING
Adjustment of Rates and Charges Applicable to)	RATE DESIGNS
Electric Utility Service in North Carolina)	
)	

BY THE COMMISSION: On July 2, 2019, in Docket No. E-7, Sub 1146, the Commission issued an Order Approving Pilots that approved nine pilot advanced rate design offerings proposed by Duke Energy Carolinas, LLC (DEC), with modifications proposed by the Public Staff and accepted by DEC. The pilots were approved for one year through September 30, 2020. On July 9, 2019, DEC filed compliance tariffs for its pilot programs, which tariffs were approved by the Commission on July 29, 2019.

On October 1, 2020, in response to a motion by DEC, the Commission issued an Order extending the pilot rates to July 1, 2021.

On May 7, 2021, DEC filed a petition in Docket No. E-7, Sub 1253, requesting that the Commission give final approval to three advanced rate designs, as follows: (1) Residential Service: Time of Use with Critical Peak Pricing Schedules - RSTC for standard customers; (2) Residential Service: Time of Use with Critical Peak Pricing Schedules - RETC for all-electric customers; and (3) Small General Service: Time of Use with Critical Peak Pricing Schedule (SGSTC). These three advanced rate designs were described in detail by DEC in its petition. DEC requested that the three advanced rate designs be approved for service on and after July 1, 2021, and stated that if Commission approval could not be granted sufficiently in advance to make the transition by that date DEC requested that the pilots be extended for 45 days from the date of an order approving the new advanced rate designs so that DEC could implement an orderly transition.

DEC stated that the pilots produced meaningful and actionable findings and demonstrated the potential for customers to change their consumption patterns in response to price signals, creating bill savings and system benefits. Moreover, DEC stated that the pilots provided guidance on many specific elements of rate design, such as the difficulty that residential customers have in understanding the demand charges in the pilots or the limited benefits of having both “high” and “critical” pricing events. According to DEC, these lessons and many more have been incorporated into the final three rate designs that it is proposing to launch on July 1, 2021. In addition, DEC stated that it held several meetings with the Public Staff to preview the proposed final rate

designs and to explain the reasoning and data behind the review of the time-of-use periods. DEC also attached the proposed tariffs for the three rate designs to its petition.

On May 28, 2021, the Commission issued an Order requesting comments and reply comments on DEC's proposed rate designs, extending the existing pilot advanced rates until further order by the Commission, and making all parties to Docket No. E-7, Sub 1146 parties to Docket No. E-7, Sub 1253 without the necessity of said parties filing a petition to intervene in Docket No. E-7, Sub 1253.

On August 2, 2021, DEC filed the Final Report on Dynamic Pilot Rates which included the results of numerous customer surveys and customer bill analyses completed as part of the pilot. The Report presented detailed analysis of how the electricity usage and expenditures resulting from the pilot advanced rate designs (TOU Pilots), compared to the usage that would have occurred under the rates that otherwise would have been in effect.

Comments were filed by the Public Staff, and jointly by North Carolina Justice Center, North Carolina Housing Coalition, Southern Alliance for Clean Energy, and Natural Resources Defense Council (NCJC, *et al.*). Reply comments were filed by DEC.

Summary of Comments

Public Staff

The Public Staff referred to the RSTC, RETC, and SGSTC collectively as DEC's proposed TOU Schedules. According to the Public Staff, DEC indicated that the proposed TOU Schedules are the result of the TOU Pilots, and DEC's review of TOU periods and other considerations. The Public Staff stated that it has worked closely with DEC since the beginning of the TOU Pilots and has monitored the progress of each of the nine individual pilot rate schedules that was approved in Sub 1146. Further, the Public Staff stated that the proposed TOU Schedules can produce meaningful beneficial shifts in energy consumption and behavior based on the results of the TOU Pilots.

In addition, the Public Staff noted that DEC also analyzed projected load patterns and costs to develop the TOU periods. The Public Staff stated that there is a marked resemblance between the design and structure of the TOU Schedules with those developed for qualifying facilities in Docket No. E-100, Sub 158, including on- and off-peak pricing periods. Moreover, the Public Staff stated that the findings from the TOU Pilots suggest that customers had a significant response to pricing signals initiated by DEC, and those responses produced real reductions in load during peak periods. The Public Staff opined that as DEC shifts to winter peaking where there are traditionally less demand response resources available, the load reductions available from TOU rates become more and more important. Finally, the Public Staff stated that approval of the TOU Schedules should not infringe on the work of the Comprehensive Rate Design Study that was ordered in DEC's last general rate case in Docket No. E-7, Sub 1214, and that the Study should include a review of the TOU rates, and could potentially result in further

refinement of the TOU Schedules. Based on its review, the Public Staff recommended that the proposed TOU Schedules should be approved as filed.

NCJC, *et al.*

NCJC, *et al.*, stated that it supports DEC's proposed TOU Schedules, that it supports affordable, forward-looking rate designs that properly align opportunities for customer bill-savings with reductions in the utility's cost of service, and that it considers DEC's proposed TOU Schedules to be one part of a suite of utility options that can help to make utility service more affordable and equitable. NCJC, *et al.*, stated that DEC's TOU Schedules will provide customers with price signals that encourage customers to shift their usage away from more expensive system peaks, resulting in both customer bill savings and utility system savings that should benefit all ratepayers. NCJC, *et al.*, stated that in addition to supporting the TOU Schedules, it requests that DEC: (1) take steps to make the new rate offerings more accessible to low-income households; (2) continue to avoid residential demand charges in its residential rate offerings as both difficult to understand and not cost based; and (3) work with stakeholders to provide additional rate offerings that will benefit customers for electric vehicle charging at off-peak times even when such customers do not choose the TOU Schedules for electric service to their entire household. NCJC, *et al.*, discussed these three points in detail.

DEC

DEC noted that the Public Staff and NCJC, *et al.*, support the approval of DEC's TOU Schedules as filed, and that no party filed comments opposing approval. Further, DEC agreed with the Public Staff's comments regarding the meaningful beneficial shifts in energy consumption and behavior that can be achieved through DEC's proposed TOU Schedules, and the increasing value of load reductions through rate design as DEC shifts to a winter peaking system. In addition, DEC agreed with the Public Staff that approval of the proposed rates should not infringe on the work of the Comprehensive Rate Design Study, and that the Study could potentially result in further refinement and/or expansion of DEC's portfolio of rate schedules.

With regard to the comments of NCJC, *et al.*, DEC stated that it supports the goals of working to make the proposed rates accessible to low-income households and of providing additional rate offerings to incent electric vehicle charging at off-peak times. DEC stated that it intends to work with stakeholders through the Low-Income Affordability Collaborative and Comprehensive Rate Design Study to identify and evaluate potential solutions to achieve these goals.

Discussion and Conclusions

The Commission appreciates the work of DEC and the parties in designing and implementing a pilot rate design program that employed interim electric rate designs to produce meaningful data and insight about rates that incent customers to shift energy consumption to off-peak periods. Based on the information gained from the pilot program,

and the record in these dockets, the Commission concludes that it has a sound basis of data and good cause to approve the proposed TOU Schedules attached to DEC's petition.

In addition, the Commission finds good cause to direct that the Comprehensive Rate Design Study ordered in DEC's Sub 1214 general rate case should include a review of the TOU Schedules, an analysis of the structural and behavioral customer bill impacts like that which was completed for the TOU Pilots, and suggestions for further refinement of the TOU Schedules if found appropriate during the Study.

Finally, in order to provide DEC with an adequate transition period the Commission finds good cause to extend the availability of the current pilot advanced rates until October 1, 2021, at which time the TOU Schedules shall become effective.

IT IS, THEREFORE, ORDERED as follows:

1. That DEC's TOU Schedules shall be, and are hereby, approved for service provided by DEC on and after October 1, 2021;
2. That the availability of the pilot advanced rates presently in effect shall be extended to October 1, 2021; and
3. That the Comprehensive Rate Design Study ordered in DEC's Sub 1214 general rate case shall include a review of the TOU Schedules, an analysis of the structural and behavioral customer bill impacts like that which was completed for the TOU Pilots, and suggestions for further refinement of the TOU Schedules if found appropriate during the Study.

ISSUED BY ORDER OF THE COMMISSION.

This the 25th day of August, 2021.

NORTH CAROLINA UTILITIES COMMISSION



Lindsey A. Worley, Acting Deputy Clerk

Chair Charlotte A. Mitchell did not participate in this decision.