

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-7, SUB 1167

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	
Application by Duke Energy)	PUBLIC STAFF COMMENTS ON
Carolinas, LLC, for Approval of)	APPLICATION FOR PROGRAM
Prepaid Advantage Energy)	APPROVAL
Efficiency Pilot Program)	

NOW COMES THE PUBLIC STAFF - North Carolina Utilities Commission (Public Staff), by and through its Executive Director, Christopher J. Ayers, pursuant to Commission Rule R8-68(d)(2), and responds to the application (Application) filed January 16, 2018, by Duke Energy Carolinas, LLC (DEC or the Company), for approval of its Prepaid Advantage Energy Efficiency Pilot Program (Prepaid Pilot or Pilot).

1. On January 16, 2018, DEC filed its proposed Prepaid Pilot and requested that the Commission (1) approve the Pilot as an energy efficiency (EE) program under G.S. 62-133.9 and Commission Rule R8-68; (2) find that the Pilot meets the requirements of a “new” EE program consistent with Commission Rule R8-69; (3) find that the costs of the Pilot are eligible for recovery through DEC’s annual Rule R8-69(b) rider; (4) approve the Pilot for recovery of utility incentives associated with the Pilot; and (5) approve the Company’s request for waiver of certain Commission Rules.

2. On February 7, 2018, the Commission granted the Public Staff and other interested parties an extension of time until April 2, 2018, to file protest, intervention, or comments regarding the proposed Pilot.

3. On March 19, 2018, the Commission granted the Public Staff and other interested parties a second extension of time until April 16, 2018, to file protest, intervention, or comments regarding the proposed Pilot.

4. The Public Staff's investigation included review of the Petition with respect to: (a) G.S. 62-133.9; (b) Commission Rule R8-68; (c) the Agreement and Stipulation of Settlement made by and between DEC, the Public Staff, SACE, the Environmental Defense Fund, the Natural Resources Defense Council, the North Carolina Sustainable Energy Association, and the South Carolina Coastal Conservation League, filed August 19, 2013, in Docket No. E-7, Sub 1032 (Stipulation), which included a DSM/EE cost recovery and incentive mechanism; (d) the Commission's *Order Approving DSM/EE Programs and Stipulation of Settlement*, issued October 29, 2013, in Docket No. E-7, Sub 1032 (the Sub 1032 Order); and, (e) the Commission's *Order Approving DSM/EE Rider, Revising DSM/EE Mechanism, and Requiring Filing of Proposed Customer Notice* issued August 23, 2017, in Docket No. E-7, Sub 1130 (Sub 1130 Order) (collectively referred to as "Revised Mechanism"). The Public Staff's investigation also involved submission of data requests to DEC regarding the Pilot, and review of the responses. Based on its investigation, the Public Staff submits the following comments for the Commission's consideration.

Description of the Pilot

5. The Prepaid Pilot consists of three components: (1) a new billing option that allows new or existing DEC customers to voluntarily enroll in an electric service tariff that provides participants with the opportunity to pay for their energy consumption in advance of their actual usage and settle their account with the Company on a daily basis; (2) the provision of usage data to participating customers, and (3) the provision of EE tips and behavioral recommendations to participating customers.

6. The billing option component of the Prepaid Pilot is designed to enable customers to manage their bills by allowing them to choose when and how much to pay, thereby reducing the potential for unexpected events, such as high bills and non-pay disconnects. Service disconnects for customers participating the Pilot will not be subject to a reconnection fee.¹ This Pilot would also allow the Company to gather information related to customer satisfaction, participation, and communication.

7. A component of the Pilot is the provision of EE tips and behavioral recommendations. Through the application of EE recommendations and access to the Company's online portal, engaged participants are expected to become more energy efficient through the ability to more dynamically manage their energy usage.

¹ In reports filed in Docket No. M-100, Sub 61A, DEC had over 9,100 residential disconnects for non-payment each month in 2017.

8. No monetary incentive will be given to participants; however, participants will be given a waiver of their first payment transaction service fee each month. This waiver amounts to \$1.50, which is to cover the per transaction service fee paid to the program administrator for one transaction. Participants will be charged a fee for any additional transactions each month.

Eligibility and Mechanics of the Pilot

9. The Prepaid Pilot will be offered to a maximum of 8,000 customers within DEC's North Carolina territory. All participants must have service that is metered with Advanced Metering Infrastructure (AMI or smart meter). The Company is requesting to offer the Prepaid Pilot for a two-year period. Participants of the Pilot must be residential customers that are not served on a time of use rate schedule, Schedule WC, or Rider NM, are not enrolled in the Equalized Payment Plan, are not on an active deferred payment arrangement, and are not identified by a "special code"² pursuant to Commission Rule 12-11(q).

10. For customers enrolling in the Prepaid Pilot with an outstanding balance³ under the traditional "post-pay" method, any payment made through the Pilot will be divided with 25% of payments applied to the outstanding balance and 75% of payments applied to the future electric costs until the entire outstanding balance is satisfied.

² "Special Code" typically refers to customers with critical medical needs such that any disruption of service could be result in a life-threatening situation.

³ Customers that have an outstanding balance of more than \$500 are not eligible to participate in the Prepaid Pilot.

11. Customers that are allowed to participate in the Pilot must make a minimum initial deposit of at least \$40 to establish the initial funds for the account. However, the initial customer deposit otherwise required for service is waived. For current DEC customers that have paid a deposit to the Company, the deposit with any accrued interest will be automatically applied to the prepaid account as an initial payment.

12. As energy is used, the account deducts the cost of the energy from the funds remaining. As funds are depleted, the customer will eventually need to add more funds or risk being disconnected from electric service until funds are added.

13. The Company intends to keep track of these customer accounts by making daily meter reads to establish how much of the customer's balance is remaining. The AMI data will be uploaded to the Company's accounting system and will update the customer's account balance. The customer will be able to see hourly usage data from the previous day.⁴ After the meter is read, customers that have a zero balance remaining on their account will be disconnected typically between the hours of 10 am and 2 pm on the following business day.⁵

14. Customers will be required to provide the Company with a direct communication channel (email address and text/phone number). Customers will receive a minimum of three message alerts in the form of an email, text message, or automated voice message five days, three days, and one day before their

⁴ "Previous day" is defined as the previous 24 hour period at the time of the meter read, not necessarily the previous full day.

⁵ Exceptions are made to those customers that fall to a \$0 balance on a Friday/weekend or state/federal holiday, which is consistent with how the Company handles all disconnections.

accounts reach a zero balance. These “days remaining” messages can be modified to the preference of the customer.

Conclusions and Recommendations

15. The billing and data usage components of the Prepaid Pilot are basic functionalities of AMI meters and should not be the basis of an EE program. Customers should receive the full benefits of AMI meter functionality, including the prepaid billing option, as part of normal electric service provided under base rates, not divided between a base rate portion and an incremental portion supposedly targeted only at generating DSM/EE savings, with the incremental costs of an individual functionality of the AMI meters paid for through DSM/EE rider mechanisms.

16. The Company has been updating its technology base in an attempt to modernize various aspects of its operations. The Company is currently replacing its automatic meter reading (AMR) meters with AMI meters and updating its 30-plus year-old customer information system.

17. Since 2013, the Company has been actively exchanging its current AMR meters with AMI meters and as of the end of 2017, DEC has replaced approximately 35% of its total meter base across its North Carolina service territory. The Company, in its currently pending rate case application,⁶ has included the costs of AMI meters deployed through 2017 in its rate base, and asked for a regulatory asset to address the residual book value of the AMR meters being

⁶ Docket No. E-7, Sub 1146

replaced with AMI meters. The functionality of a prepaid utility service will be available with the use of AMI and the new customer information system, and will enhance the customer benefits associated with these technology improvements.

18. The combination of AMI meter deployment and the new customer information system will allow the Company to offer customers new billing options. The option to prepay for service is one of those options. In its most recent rate case, the Company raised the potential for other new billing options, such as allowing customers to set their own due date. In addition, the Company will also be able to offer customers access to data regarding their energy usage.

19. The Company should not limit the availability of the functionality and advanced features of AMI meters only to customers enrolled in EE programs, or customers in certain classes or on certain rates. The enhanced billing system and data usage functionality allowed from this advancement in technology should be provided to all customers, and not limited to a subset of customers enrolled in programs where the Company is allowed to recover its costs in a rider proceeding and receive a bonus utility incentive, plus a net lost revenue incentive, from all customers.

20. The Public Staff is supportive of the new functionality and advanced features allowed by AMI meters. In particular, the Public Staff would encourage the Company to request approval from the Commission to offer a prepay billing option that is not presented as a DSM/EE program. The Public Staff further encourages the Company to maximize customers' ability to timely access usage data that is produced by their respective AMI meters.

21. While the Public Staff does not believe that billing options and access to usage information should be the subject of EE programs, the Public Staff believes the Company could design an EE program that consisted of true DSM/EE measures that utilize the advanced features of AMI. However, designing an EE program that encourages customers to reduce energy consumption by utilizing the functionality of a new technology does not make the new technology itself an EE program, but rather the technology is a platform to be used to help accomplish energy efficiency.

22. For example, to the extent EE savings are realized from availability of data usage information, the potential for EE savings will be a function of what the customer does with the data, not the data itself.

23. Alternatively, providing EE tips and behavioral recommendations that are customized to participants of a prepaid billing program could result in EE savings that would be a function of customers utilizing the EE tips to actively manage their usage, not from the billing program itself.

24. Therefore, the Public Staff recommends that the Commission deny the Company's request for approval of the Prepaid Pilot as a new DSM/EE program.

25. Nevertheless, should the Commission find that the Prepaid Pilot qualifies as a new EE program, the Public Staff would ask the Commission to hold the docket open for further comments pending the resolution of the DSM/EE rider proceeding in Docket No. E-7, Sub 1164. Currently, the Public Staff and the Company do not agree on how to calculate the avoided capacity cost rates used

for the cost effectiveness tests. As shown in its application, under the Company's calculations the Pilot is cost effective. However, using the Public Staff's application of avoided cost rates in the cost effectiveness tests, the Pilot is not cost effective. As this issue will affect DEC's entire DSM/EE portfolio, the Public Staff will seek resolution of the issue in the pending rider proceeding, and that resolution should be determinative of the issue of cost-effectiveness of this Pilot.

Respectfully submitted this the 16th day of April, 2018.

PUBLIC STAFF
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Electronically submitted
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CERTIFICATE OF SERVICE

I certify that a copy of this Response to Petition for Approval of Program has been served on all parties of record or their attorneys, or both, in accordance with Commission Rule R1-39, by United States Mail, first class or better; by hand delivery; or by means of facsimile or electronic delivery upon agreement of the receiving party.

This the 16th day April, 2018.

Electronically submitted
/s/ Heather D. Fennell
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