

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-7, SUB 1275

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of

Application by Duke Energy Carolinas, LLC)	ORDER EXTENDING STARTING
for Approval of Electric Vehicle-to-Grid)	DATE OF PILOT PROGRAM
Pilot Program Pursuant to N.C. Gen. Stat.)	AND MODIFYING REPORTING
§ 62-133.9 and Commission Rule R8-68)	REQUIREMENTS

BY THE COMMISSION: On August 16, 2022, Duke Energy Carolinas, LLC (DEC or Company), filed an Application in the above-captioned docket for Commission approval of its proposed Electric Vehicle Load Control Service Pilot (V2G) Program as a new demand-side management (DSM) program. In summary, DEC stated that it would work with the Ford Motor Company (Ford), to implement a program that would allow DEC to use certain electric vehicle (EV) batteries in leased trucks as a dispatchable distributed energy resource to help manage peak load conditions. According to DEC, the V2G pilot would allow DEC to evaluate the bi-directional vehicle-to-grid technology, the availability and performance of EV batteries, and how the load management activities impact the battery life and functionality, as well as gain insight into customers' behaviors and willingness to allow DEC to control EV batteries. DEC stated that pilot participants would be individually metered residential customers who had leased a qualifying EV and installed the necessary EV supply equipment at their residences. DEC explained that initially the Ford F150 Lightning would serve as the only EV for the pilot, but that it expected to expand the program to include other models and manufacturers in the future.

In addition, DEC stated that participants would allow DEC to dispatch the EV battery's electricity for up to 24 control/discharge events per year and would receive an incentive of \$6.50 per kilowatt (kW) demand per month in the form of a payment by DEC to Ford to reduce the customer's monthly EV lease payment. The Company stated that it expected to begin the pilot program on January 1, 2024, and to enroll at least 35 participants and no more than 100 participants.

On April 11, 2023, after receiving comments and reply comments, the Commission issued an Order approving the V2G Pilot as a new DSM program with a duration of two years (V2G Order). The V2G Order provided that prior to the end of the two year duration DEC could petition the Commission for approval to extend the pilot program, transition the pilot into a fully commercialized program, or end the program. The V2G Order further approved a reporting template agreed upon by DEC and the Public Staff and required DEC to file the first report nine months from the date of the Order and every six months thereafter.

On November 22, 2023, DEC filed a motion requesting to postpone implementation of the V2G Pilot until January 1, 2025. The Company explained that high inflation and lingering supply chain constraints for parts and components have directly impacted the automotive industry, leading to a slowdown in the production of new vehicles, including EVs potentially capable of participating in the V2G Pilot. DEC stated that since filing the V2G Application it has engaged with potential original equipment manufacturers and has monitored developments in the EV industry. As a result, DEC has observed significant differences in the projected and actual numbers of EV deliveries, customer installations of home integration kits, and numbers of customers choosing to lease eligible vehicles versus purchasing them. In addition, the Company stated that it continues to monitor the development and commercial availability of the software that is essential to EV bi-directional capabilities and the Company's implementation of the V2G Pilot. According to DEC, it is in the public interest to delay implementation of the V2G Pilot to await changes in the availability of V2G capable EVs and improved economic conditions so that the Company can design a program that will provide more robust and meaningful information on the potential benefits of bi-directional V2G technology.

DEC also requested that the Commission modify the Company's reporting requirements to allow it to report every six months after January 1, 2024, on the status of (1) the development of the required bi-directional V2G software needed to implement the pilot, (2) the number of customers in DEC's service territory that have installed the required home integration kits, (3) the number of available V2G-capable EVs in DEC's service territory, and (4) changes in supply chain or manufacturing constraints that impact the pilot. Further, DEC stated that if circumstances change such that the Company can launch the pilot sooner than January 1, 2025, it will file an update with the Commission and a request to launch the pilot at an earlier date.

On December 6, 2023, the Public Staff filed a letter stating that it does not oppose the 12-month extension but recommends that the Commission order DEC and the Public Staff to confer, at least 120 days prior to the requested January 1, 2025 effective date, to discuss what program modifications, if any, may be necessary to ensure the viability of the V2G Pilot, and to file a report explaining any proposed modifications on or before 60 days prior to the requested January 1, 2025 effective date. The Public Staff further stated that it had conferred with DEC and that DEC consents to this recommendation.

Based on the forgoing and the record, the Commission finds good cause to grant DEC's motion to postpone implementation of the V2G Pilot Program until January 1, 2025, and to modify the Company's reporting requirements as requested in DEC's motion. Further, the Commission finds good cause to direct that on or before August 30, 2024, DEC and the Public Staff shall confer to discuss what program modifications, if any, may be necessary to ensure the viability of the V2G Pilot, and shall file a report explaining any proposed modifications on or before November 1, 2024.

Finally, the Commission finds good cause to reaffirm the guidelines detailed in the V2G Order for the duration and potential continuation of the pilot program, the EM&V evaluation plan, and the reporting requirements, effective upon implementation of the program on January 1, 2025.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 11th day of December, 2023.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in black ink, reading "Tamika D. Conyers". The signature is written in a cursive, flowing style.

Tamika D. Conyers, Deputy Clerk