

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-2, SUB 1197
DOCKET NO. E-7, SUB 1195

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of)	
)	
Application by Duke Energy Carolinas,)	COMMENTS OF ConnectDER
LLC and Duke Energy Progress, LLC)	ON PROPOSED PHASE II Electric
For Approval of Phase II Electric)	Transportation Pilot Programs
<u>Transportation Pilot Programs</u>)	("Phase II Pilots")

Pursuant to the *Order Requesting Comments on Proposed Revised Pilot Programs* issued on June 14, 2021, by the North Carolina Utilities Commission (the "Commission") in the docket mentioned above, ConnectDER, LLC ("Company") respectfully submits the following comments regarding the Phase II Electric Transportation Pilot Programs ("Phase II Pilots") filed by Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP"), (collectively, "the Companies" or "Duke") on May 24, 2021.

I. BACKGROUND

On March 29, 2019, the Companies filed an application in the above-captioned dockets.

On April 4, 2019, the Commission issued an order requesting comments and reply comments on Duke's proposal.

By orders issued October 25, 2019, and November 1, 2019, the Commission scheduled a hearing in this matter and notified parties of the topics to be addressed.

On November 24, 2020, the Commission issued an order approving Electric Transportation Pilot, in Part ("Phase I")

On April 30, 2021, the companies filed a Request for Approval of Make Ready Credit Programs.

On May 24, 2021, the Companies filed a Request for Approval of Phase II ET Pilot Programs.

On May 28, 2021, the Commission issued an order requesting comments on the Make Ready Credit Programs.

On June 14, 2021, the Commission issued an order requesting comments on proposed revised pilot programs.

On July 8, 2021, the Commission issued an order granting parties an extension of time to file comments.

II. INTRODUCTION TO CONNECTDER

ConnectDER, LLC is a for-profit corporation organized and existing under the laws of the Commonwealth of Virginia, headquartered in Virginia. ConnectDER was founded in 2011 with the stated mission to *unlock the massive potential of DERs by turning the meter socket into the utility's all-in-one plug-in point for solar, storage, EVs, and beyond.*

ConnectDER has created and patented a novel ConnectDER collar technology (“technology”) capable of the safe and reliable interconnection of DERs between the customer’s meter socket and the utility metering. Initially designed to improve distributed solar and storage interconnection, the ConnectDER has enhanced and expanded the original design to enable the affordable interconnection of EV Chargers directly to a customer’s meter. By connecting directly between the customer’s meter socket and the utility meter, ConnectDER eliminates the need for costly upgrades to customer-side wiring.

The ConnectDER technology permits the bi-directional flow of energy between the grid and customers. Our technology can be configured for either front-of-meter or behind-the-meter configurations depending on the customer and programmatic objectives. Additionally, the ConnectDER technology may be configured with integrated revenue-grade metering and integrated with the local utility metering and billing platforms via multiple remote

communication mediums such as AMI or Cellular. Integrated metering can eliminate the need for customers to install costly additional metering. Coupled with internal electrical disconnect switches, ConnectDER can be an efficient element of a more extensive managed charging program.

Our devices are Underwriter Laboratory (UL) Certified and have been rigorously tested to ensure safety and reliability for customers in 13 states across the US, with nearly 10,000 units in service today.

III. COMMENTS

1. ConnectDER applauds the Commission's efforts to expand EV infrastructure and believes the investment is in the public interest.

ConnectDER recognizes the intent and effort of the Commission to expand Electric Vehicles infrastructure in North Carolina. ConnectDER believes the growth of flexible, distributed load and reduced emissions from internal combustion engines to be in the public interest.

ConnectDER acknowledges the Commission's and the Company's efforts to engage stakeholders in developing the Phase II Pilots and looks forward to participating in future stakeholder working group meetings.

2. ConnectDER supports the Companies' proposed Phase II Electric Transportation Pilot Program

ConnectDER recognizes and supports the role utilities can play in enabling an electric transportation future. Expressly, ConnectDER acknowledges the need for as

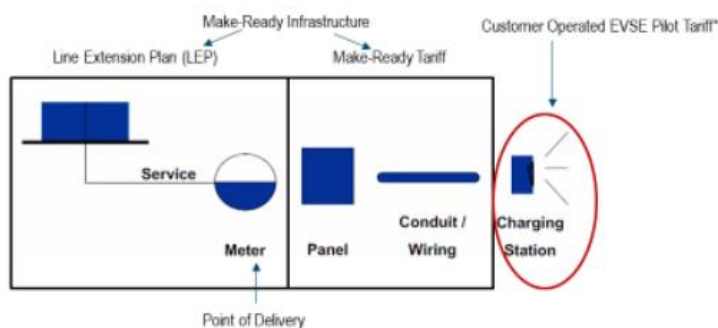
many customers as reasonably possible to have access to enabling electric vehicle infrastructure and the ability of the utilities to serve that need.

3. **ConnectDER's flexibility as an asset allows it to potentially qualify as a component for both elements of the Make Ready Program as well as the EVSE program**

The ConnectDER is an all-in-one device enabling EV charger interconnection and replaces the need for potentially expensive infrastructure such as the service panel and conduit/wiring modifications. In addition to providing interconnection, the ConnectDER technology integrates revenue-grade metering to transmit critical energy usage data to utilities and customers. As a result of this versatility, we see the ConnectDER as an affordable element of all three electric vehicle charging infrastructure pilot program aspects. (Line Extension Policy, Make Ready Tariff, and EVSE Pilot Tariff).

In the provided simplified diagram¹, the EVSE Pilot Tariff includes the charging station. The Companies divide the Make-Ready Infrastructure into Line Extension Plan

Customer Operated EVSE Pilot



**Customers do not have to participate in the EVSE Pilot to receive the make-ready revenue credit.*

(LEP) and Make-Ready Tariff components.

¹ Application at 12.

Line Extension Policy (LEP)

ConnectDER's integrated revenue-grade meter eliminates the need to install any additional meter and meter socket on the customer's property and all associated risks and costs. The internal metering capabilities can be integrated with the Utilities' Meter Data Management systems and provide accurate energy consumption data to support advanced rate design mechanisms. Incorporating ConnectDER into the LEP enables all customers to benefit from more affordable and more functional metering capabilities.

Make Ready Tariff

ConnectDER simplifies the interconnection process and eliminates the need for reconfiguring the customer's internal electrical infrastructure and the associated risks and costs. Connect DER reduces the on-site time to interconnect by orders of magnitude. Due to the 'plug-and-play' method of interconnection, risks to installers and potential damage and liability to customer homes are also significantly reduced.

ConnectDER also integrates a local disconnect breaker, capable of being remotely operated by the utility as needed for managed charging programs and electrical isolation for maintenance of utility equipment.

EVSE Pilot Tariff

ConnectDER is an interconnection device. It could be considered an extension of the EV Charger itself and incorporated in the EVSE Pilot Tariff.

4. ConnectDER supports multiple ownership structures

ConnectDER believes the inclusion of our technology can simplify and reduce the costs of utility programs to expand access to EV charging. As stated above, developing EV charging is in the public interest. As a result, we believe utility ownership is both a responsible and prudent investment in the public interest.

Simultaneously, as seen in other jurisdictions, ConnectDER can be a safe and reliable means for interconnection EV charging and a range of DERs. We believe customers can benefit from our technology, regardless of participation in the utility programs.

5. ConnectDER simplifies the integration of EV Charging Infrastructure into managed charging applications.

The integrated metering and remotely operated breaker allow utilities to integrate with the ConnectDER to control charging operations aligned with their peak demand response and revenue management policies. ConnectDER is agnostic to EV charging Original Equipment Manufacturers (OEM). As a result, the utility can integrate with one product instead of many, potentially reducing the cost of demand-side management programs.

6. ConnectDER can enhance the public charging program in Tier1 and Tier 2 counties

In addition to supporting the residential EV Markets, ConnectDER can provide the opportunity for low-cost, single bay, distributed charging infrastructure. Any commercial customer with a meter socket can affordably add one charger per meter socket, allowing additional flexibility in outreach to targeted communities and counties.

7. ConnectDER supports internal and external chargers.

In the below table, the program identifies mounting as “Inside Wall.”

ConnectDER recommends the Companies consider both internal and external mounted EV Chargers to improve program flexibility and potentially avoid costs for all customers.

(1) Residential

EVSE Description	kW ranges	Mounting	EVSE Monthly Rate
Non-Networked 32A 240V EVSE 25ft Cord	Up to 9.6 kW	Inside Wall	\$12.74
Networked 32A 240V EVSE 25ft Cord Includes Software	Up to 9.6 kW	Inside Wall	\$16.41

(2) Non-Residential

EVSE Description	kW ranges	Mounting	EVSE Monthly Rate
Non-Networked 40A 240V EVSE 25ft Cord	6 to 9.6 kW	Outside Wall	\$17.17
Networked Client 40A 240V EVSE, 25ft Cord, Includes Software	6 to 9.6 kW	Outside Wall	\$72.49
Networked Gateway 40A 240V EVSE, 25ft Cord, Includes Software	6 to 9.6 kW	Outside Wall	\$83.79

IV. Conclusion

ConnectDER is grateful to the Commission for the opportunity to participate as a stakeholder in the State’s regulatory process. We believe our technology aligns with the Commission’s goals to expand EV infrastructure while creating options to safely and reliably serve customers at a lower overall cost. We believe our technology enables the Companies to have more opportunities to serve a broad spectrum of customers and reduce barriers to the adoption of electric vehicles. Incorporating ConnectDER as a utility-owned asset is in the public’s interest and is a just and reasonable inclusion into the program design.