

Kendrick C. Fentress Associate General Counsel

NCRH 20 / P.O. Box 1551 Raleigh, NC 27602 o: 919.546.6733

Kendrick.Fentress@duke-energy.com

April 21, 2023

VIA ELECTRONIC FILING

Ms. A. Shonta Dunston Chief Clerk North Carolina Utilities Commission 4325 Mail Service Center Raleigh, North Carolina 27699-4300

Re: Duke Energy Carolinas, LLC's Compliance Filing for Electric Vehicle to Grid Pilot Docket No. E-7, Sub 1275

Dear Ms. Dunston:

On April 11, 2023, the North Carolina Utilities Commission ("Commission") issued its Order Approving Pilot Program Subject to Conditions, in the afore-captioned docket ("V2G Order"). Ordering Paragraph No. 6 directed Duke Energy Carolinas, LLC ("DEC" or the "Company") to file tariffs for the approved pilot program ("Pilot") within ten days of the date of this Order that include the effective date of the program. The attached tariff, in clean and redlined version, includes an effective day of January 1, 2024. As the Commission noted in its V2G Order, DEC is working with Ford Motor Company ("Ford") in implementing this Pilot, "bring[ing] together commercial interests and the public interest to serve the customers of both Ford and DEC." V2G Order at 7. Ford has indicated to the Company that the software necessary for the Pilot to commence is not yet complete. Based on the Company's discussions with Ford and the delay in the necessary software, the Company believes that a January 1, 2024 effective date is appropriate. The Company intends to comply with the Commission's direction to file a report nine months after Commission approval; however, the data included in that report may be limited due to the revised effective date of January 1, 2024. Therefore, that initial report will likely be an update to the Commission on the Company's commencement of the Pilot. Additionally, the Company will review extending the two-year Pilot term as appropriate and as directed by the Commission in Ordering Paragraph No. 4 of the V2G Order.

The Company shared this filing with the Public Staff prior to making it, and the Public Staff had no objections.

Sincerely,

Kendnik C. Jerstress

Kendrick C. Fentress

Enclosure

cc: Parties of Record

RIDER EVM (NC) EV MANAGER LOAD CONTROL SERVICE PILOT

AVAILABILITY (North Carolina Only)

Available to up to 100 individually metered residential customers receiving concurrent service from the Company where a bidirectional home integration system involving an eligible electric vehicle (EV) is installed on the Customer's side of the delivery point, for the Customer's own use, interconnected with and operated in parallel with the Company's distribution system. Participating Customers must be leasing a bi-directional capable electric vehicle from a participating OEM and have the necessary eligible Electric Vehicle Supply Equipment (EVSE) installed at the primary residence and allow the Company to have the necessary control to discharge the vehicle's battery to reduce utility system demand. The Company shall be allowed to monitor their operation under the provisions of this Pilot.

Customers are not permitted to participate in other managed EV charging programs while participating in the Pilot.

PARTICIPATION INCENTIVES

In recognition of the energy and capacity benefits to the utility system, customers participating in the Pilot will receive a financial incentive in the amount of approximately \$6.50/kW of eligible battery discharge capability. The incentive is based on an assumed availability factor when the EV will be plugged into the EVSE. At the end of each 12 months of a customer's participation, if a customer's actual annual availability of the discharge capability exceeds the assumed capability, the Company will provide the customer with a performance incentive in the form of a \$25 gift card.

PAYMENT OF INCENTIVES

The Company's payment of Incentives will be conveyed as a monthly financial credit in the form of a reduction in the customer's monthly EV lease payment.

INTERRUPTION

The Company may call up to 24 battery discharge events per year, with up to three events occurring in each Winter Month (December – February) and each Summer Month (June – August) and up to one event occurring in each shoulder month (September – November and March – May). Customers will be notified at least 18 hours ahead of a discharge event.

Company shall be allowed, at its discretion, to discharge the participating customers EV battery for up to four (4) hours during each event. Company reserves the right for interruption outside of these parameters in the event continuity of service is threatened.

The Company reserves the right to test the connectivity and discharge capability of the participant's EV battery at any time, without notice, and such test periods shall be counted toward the maximum number of events. Customer shall have the option to opt out of a discharge control event; however, if Customer exceeds two (2) control event opt-outs in a single Winter or Summer control season, Customer may be subject to removal from the program and forfeit receipt of program incentives. A control event opt-out includes non-participation from part or whole of the discharge time period when the EV is connected to the EVSE.

EQUIPMENT INSPECTION AND SERVICING

For EVSE used to discharge participating customers' EV batteries, the Company or its agents shall have the right of ingress and egress to Customer's premises at all reasonable hours for the purpose of inspecting the equipment to ensure connection and operability to effectively discharge participant's EV batteries. Company and Customer shall schedule a convenient time for such purposes whenever it is necessary to inspect a Customer's EVSE.

SAFETY, INTERCONNECTION, AND INSPECTION REQUIREMENTS

This Pilot is only applicable for installed generation systems and equipment that comply with the provisions outlined in the North Carolina Interconnection Procedures, Forms, and Agreements for State-Jurisdictional Generator Interconnections (hereinafter "Interconnection Procedures") as approved by the North Carolina Utilities Commission.

RIDER EVM (NC) EV MANAGER LOAD CONTROL SERVICE PILOT

The Customer must submit an Interconnection Request Application, which must be accepted by the Company, pay an application fee, comply with the liability insurance requirements of the Interconnection Procedures and enter into a specific contract providing for interconnection to the Company's system.

In order to ensure protection of the Company's system, the Company reserves the right, at its discretion, to inspect the Customer's generation system and equipment at any time upon reasonable notice to the Customer in an effort to ensure compliance with the Interconnection Procedures and Standards. The Company reserves the right to disconnect electric service to the premises if the Company determines that the Customer's generation system and equipment is not in compliance with the Interconnection Procedures or Standards and is being operated in parallel with the Company's system.

The Customer shall be responsible for any costs incurred by the Company pursuant to the Interconnection Procedures. The Company reserves the right to require additional interconnection facilities, furnished, installed, owned and maintained by the Company, at the Customer's expense, if the Customer's system, despite compliance with the Interconnection Procedures, causes safety, reliability or power quality problems.

CONTRACT PERIOD

The Contract Period shall be consistent with the term of a customer's EV lease. The Customer or Company may terminate participation under the Pilot by providing 60 days prior notice to the other party. If Customer transfers electric service to a different location within the Company's service territory, participation in the Pilot shall be transferred to the new service location upon reinstallation of the EVSE. If the Customer discontinues electric service and relocates outside the Company's service territory or otherwise discontinues participation in the Pilot within 12 months of initial participation, the Customer shall remit to the Company a Termination Payment equal to the sum of all financial incentives received.

COMPANY RETENTION OF PROGRAM BENEFITS

Incentives and other considerations offered under the terms of this Pilot are understood to be an essential element in the recipient's decision to participate in the Pilot. Upon payment of these considerations, Company will be entitled to any and all environmental, energy efficiency, and demand reduction benefits and attributes, including all reporting and compliance rights, associated with participation in the Pilot. None of the energy discharged during a load control event shall be considered eligible for resale to the Company, and any value associated with the discharged energy shall be considered to be compensated for as part of the participant's incentive.

Duke Energy Carolinas, LLC

Electricity No. 4 North Carolina Original Leaf No. 256

RIDER EVM (NC) EV MANAGER LOAD CONTROL SERVICE PILOT

AVAILABILITY (North Carolina Only)

Available to up to 100 individually metered residential customers receiving concurrent service from the Company where a bidirectional home integration system involving an eligible electric vehicle (EV) is installed on the Customer's side of the delivery point, for the Customer's own use, interconnected with and operated in parallel with the Company's distribution system. Participating Customers must be leasing a bi-directional capable electric vehicle from a participating OEM and have the necessary eligible Electric Vehicle Supply Equipment (EVSE) installed at the primary residence and allow the Company to have the necessary control to discharge the vehicle's battery to reduce utility system demand. The Company shall be allowed to monitor their operation under the provisions of this Pilot.

Customers are not permitted to participate in other managed EV charging programs while participating in the Pilot.

PARTICIPATION INCENTIVES

In recognition of the energy and capacity benefits to the utility system, customers participating in the Pilot will receive a financial incentive in the amount of approximately \$6.50/kW of eligible battery discharge capability. The incentive is based on an assumed availability factor when the EV will be plugged into the EVSE. At the end of each 12 months of a customer's participation, if a customer's actual annual availability of the discharge capability exceeds the assumed capability, the Company will provide the customer with a performance incentive in the form of a \$25 gift card.

PAYMENT OF INCENTIVES

The Company's payment of Incentives will be conveyed as a monthly financial credit in the form of a reduction in the customer's monthly EV lease payment.

INTERRUPTION

The Company may call up to 24 battery discharge events per year, with up to three events occurring in each Winter Month (December – February) and each Summer Month (June – August) and up to one event occurring in each shoulder month (September – November and March – May). Customers will be notified at least 18 hours ahead of a discharge event.

Company shall be allowed, at its discretion, to discharge the participating customers EV battery for up to four (4) hours during each event. Company reserves the right for interruption outside of these parameters in the event continuity of service is threatened.

The Company reserves the right to test the connectivity and discharge capability of the participant's EV battery at any time, without notice, and such test periods shall be counted toward the maximum number of events. Customer shall have the option to opt out of a discharge control event; however, if Customer exceeds two (2) control event opt-outs in a single Winter or Summer control season, Customer may be subject to removal from the program and forfeit receipt of program incentives. A control event opt-out includes non-participation from part or whole of the discharge time period when the EV is connected to the EVSE.

EQUIPMENT INSPECTION AND SERVICING

For EVSE used to discharge participating customers' EV batteries, the Company or its agents shall have the right of ingress and egress to Customer's premises at all reasonable hours for the purpose of inspecting the equipment to ensure connection and operability to effectively discharge participant's EV batteries. Company and Customer shall schedule a convenient time for such purposes whenever it is necessary to inspect a Customer's EVSE.

SAFETY, INTERCONNECTION, AND INSPECTION REQUIREMENTS

This Pilot is only applicable for installed generation systems and equipment that comply with the provisions outlined in the North Carolina Interconnection Procedures, Forms, and Agreements for State-Jurisdictional Generator Interconnections (hereinafter "Interconnection Procedures") as approved by the North Carolina Utilities Commission.

North Carolina Original Leaf No. 256 Effective January 1, 2024 NCUC Docket No. E-7, Sub<u>1275</u> Order dated April 11, 2023

Page 1 of 2

Formatted: Justified

Apr 21 2023

	Deleted:
/	Deleted: ,
/	Deleted:

Duke Energy Carolinas, LLC

Electricity No. 4 North Carolina Original Leaf No. 256

RIDER EVM (NC) EV MANAGER LOAD CONTROL SERVICE PILOT

The Customer must submit an Interconnection Request Application, which must be accepted by the Company, pay an application fee, comply with the liability insurance requirements of the Interconnection Procedures and enter into a specific contract providing for interconnection to the Company's system.

In order to ensure protection of the Company's system, the Company reserves the right, at its discretion, to inspect the Customer's generation system and equipment at any time upon reasonable notice to the Customer in an effort to ensure compliance with the Interconnection Procedures and Standards. The Company reserves the right to disconnect electric service to the premises if the Company determines that the Customer's generation system and equipment is not in compliance with the Interconnection Procedures or Standards and is being operated in parallel with the Company's system.

The Customer shall be responsible for any costs incurred by the Company pursuant to the Interconnection Procedures. The Company reserves the right to require additional interconnection facilities, furnished, installed, owned and maintained by the Company, at the Customer's expense, if the Customer's system, despite compliance with the Interconnection Procedures, causes safety, reliability or power quality problems.

CONTRACT PERIOD

The Contract Period shall be consistent with the term of a customer's EV lease. The Customer or Company may terminate participation under the Pilot by providing 60 days prior notice to the other party. If Customer transfers electric service to a different location within the Company's service territory, participation in the Pilot shall be transferred to the new service location upon reinstallation of the EVSE. If the Customer discontinues electric service and relocates outside the Company's service territory or otherwise discontinues participation in the Pilot within 12 months of initial participation, the Customer shall remit to the Company a Termination Payment equal to the sum of all financial incentives received.

COMPANY RETENTION OF PROGRAM BENEFITS

Incentives and other considerations offered under the terms of this Pilot are understood to be an essential element in the recipient's decision to participate in the Pilot. Upon payment of these considerations, Company will be entitled to any and all environmental, energy efficiency, and demand reduction benefits and attributes, including all reporting and compliance rights, associated with participation in the Pilot. None of the energy discharged during a load control event shall be considered eligible for resale to the Company, and any value associated with the discharged energy shall be considered to be compensated for as part of the participant's incentive.

Deleted: _____
Deleted: ,
Deleted: ____

North Carolina Original Leaf No. 256 Effective January 1, 2024 NCUC Docket No. E-7, Sub<u>1275</u> Order dated April 11, 2023

Page 2 of 2

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Carolinas, LLC's Compliance Filing, in Docket No. E-7, Sub 1275, has been served by electronic mail, hand delivery, or by depositing a copy in the United States Mail, 1st Class Postage Prepaid, properly addressed to parties of record.

This the 21st day of April, 2023.

Kendnik C. Jerstress

Kendrick C. Fentress Associate General Counsel Duke Energy Corporation P.O. Box 1551/NCRH 20 Raleigh, NC 27602-1551 Tel: 919.546.6733 Kendrick.Fentress@duke-energy.com