STATE OF NORTH CAROLINA

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

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

In the Matter of Application by Duke Energy)	
Carolinas, LLC and Duke Energy Progress, LLC)	INITIAL COMMENTS OF
For Approval of Proposed Electric Transportation)	CHARGEPOINT, INC.
Pilot)	

Consistent with the June 14, 2021, Order of the North Carolina Utilities Commission ("Commission") in these proceedings, as extended by this Commission's Order dated July 8, 2021, ChargePoint, Inc. ("ChargePoint") thanks the Commission for the opportunity to provide these comments regarding the proposed Phase II Electric Transportation Pilot Programs ("Phase II Pilot") submitted by Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP") (together, the "Companies") on May 24, 2021.

ChargePoint offers these comments in opposition to the Companies' proposed Phase II Pilots programs described in the Companies' Application. ChargePoint is frequently supportive of utility investment in EV charging infrastructure and appreciates that the Companies have submitted filings to meet Commission-established deadlines. However, several elements of the proposals would not only delay the development of a long-term, sustainable, and competitive market for EV charging in North Carolina, but are also inconsistent with the requirements of the Commission's Order.

In the event the Commission disagrees with ChargePoint's recommendation to deny the proposed pilot programs, ChargePoint recommends several amendments that will better facilitate

¹ See Duke Energy Carolinas, LLC and Duke Energy Progress, LLC's Request for Approval of Phase II Electric Transportation Pilot Programs Docket Nos. E-2, Sub 1197 and E-7, Sub 1195 (May 24, 2021) ("Application").

the deployment of EV charging infrastructure in North Carolina, and crucially, will more efficiently and effectively enable North Carolina to meet the goals of Executive Order No. 80, in which Governor Cooper directed that the State of North Carolina "strive to accomplish" increasing the number of registered, zero-emission vehicles to at least 80,000 by 2025.

In summary, our comments are as follows:

- The Companies' Phase II Pilot Programs are largely extensions of the Phase I Electric Transportation pilots previously approved by the Commission;
- The Phase II Pilot programs as proposed fail to meet the criteria set by the Commission in its ET Order and also fail to build upon the Commission-approved Phase I Pilots;
- The Commission should direct the Companies to revise their Public Level 2, MFD and Highway Corridor Pilot Programs to expressly allow for third party turnkey solutions;
- The Commission should direct the Companies to revise all Phase II Pilot programs to explicitly provide site host choice in EVSE hardware and network software;
- The Commission should direct the Companies to revise all Phase II Pilot programs to explicitly empower site hosts to establish pricing and pricing policies for EV charging services;
- The Commission should require any EV chargers installed through the EVSE Tariff Pilot to be networked; and,
- The Commission should direct the Company to modify the Public Level 2, MFD, and the Public DCFC program requirements to require EVSE to accept credit card payment via swipe or contactless.

BACKGROUND

The Companies' May 24, 2021 Request for Approval of Phase II Electric Transportation Pilot Programs (hereinafter "Request" or "Application") proposes a specific set of tariffs, approaches and programs (hereinafter the "Phase II Pilots"), and comes before the Commission in these consolidated dockets to move beyond the Companies' Phase I Pilot Programs approved pursuant to the Commission's November 24, 2020 *Order Approving Electric Transportation Pilots, In Part*, in the above captioned Docket Nos. E-2, Sub 1197 and E-7, Sub 1195 (hereinafter, the "ET Order").

I. About ChargePoint

ChargePoint is a world-leading EV charging network, providing scalable solutions for every charging scenario from home and multifamily to workplace, parking, hospitality, retail, and transport fleets of all types. ChargePoint's cloud subscription platform and software-defined charging hardware is designed to enable businesses to support drivers, add the latest software features and expand fleet needs with minimal disruption to overall business.

ChargePoint's hardware offerings include Level 2 (L2) and DC fast charging (DCFC) products, and ChargePoint provides a range of options across those charging levels for specific use cases including light duty, medium duty, and transit fleets, multi-unit dwellings, residential (multi-family and single family), destination, workplace, and more. ChargePoint's software and cloud services enable EV charging station site hosts to manage charging onsite with features like Waitlist, access control, charging analytics, and real-time availability. With modular design to help minimize downtime and make maintenance and repair more seamless, all products are UL-listed and CE (EU) certified, and Level 2 solutions are ENERGY STAR® certified.

ChargePoint's primary business model consists of selling smart charging solutions directly to businesses and organizations while offering tools that empower station owners to deploy EV charging designed for their individual application and use case. ChargePoint provides charging network services and data-driven, cloud-enabled capabilities that enable site hosts to better manage their charging assets and optimize services. For example, with those network capabilities, site hosts can view data on charging station utilization, frequency and duration of charging sessions, set access controls to the stations, and set pricing for charging services. These features are designed to maximize utilization and align the EV driver experience with the specific use case associated with the specific site host. Additionally, ChargePoint has designed its network to allow other

parties, such as electric utilities, the ability to access charging data and conduct load management to enable efficient EV load integration onto the electric grid.

II. The Companies' Proposed Phase II Electric Transportation Pilot Programs.

The Companies proposed 36-month² Phase II Pilots contain programs designed to (1) provide EV charging deployments focused on low- and moderate-income customers and rural areas, and (2) increase the number of public charging stations.³ The Companies' proposed Phase II Pilot programs are summarized below:

- Customer-Operated EV Supply Equipment (EVSE) Tariff Pilot: As proposed by the Companies, the EVSE Tariff Pilot ("EVSE Tariff Pilot") will provide customers with utility-owned L2 or DCFC EV charging stations for an "EVSE Monthly Rate" ranging from \$12.59 to \$1,527.22, depending on EVSE installed. These rates include equipment, maintenance, and annual software networking fees, but do not include the monthly charges for extra facilities associated with the Company's Service Regulations and/or Line Extension Plan, electrical panel/wiring make-ready costs, costs for work on the Company's side of the meter, non-standard equipment, or any contribution required under this Tariff. Once installed, the charging station will be owned by the utility, and operated by the customer.
- <u>Utility Owned and Operated Public Level 2 Charging</u>: As proposed by the Companies, each Company shall install, own and operate a network of up to 240 L2 stations (for a total of 480 L2 stations). Operation and maintenance of L2 stations may be performed by a qualified third-party service provider by agreement with Company. Charging stations will be installed at key publicly accessible locations in Company's North Carolina service territory to enable charging in the public sector in underserved areas and build driver confidence in EVs, with site selection specifically targeted to low-to-moderate income and rural communities. Company will give priority to installations located in U.S. postal codes that do not have existing access to public EV charging. Charging services will be available to all electric vehicle owners without preference to Company's electric service customers.⁷

² See Application, Attachments A through J. ChargePoint notes that Schedule EVSE requires customers to enter into a contract with a minimum term of 3 years to a maximum term of 10 years. All other Pilot programs have a proposed term of 36 months.

³ Application at 2.

⁴ These rates include equipment, maintenance, and annual software networking fees, but do not include the monthly charges for extra facilities associated with the Company's

Service Regulations and/or Line Extension Plan, electrical panel/wiring make-ready costs, costs for work on the Company's side of the meter, non-standard equipment, or any contribution required under this Schedule

⁵ Application, Attachment A, p. 1. Application, Attachment B, p. 1.

⁶ Application, p. 11.

⁷ Application, Attachment C, p. 1. Application, Attachment D, p. 1.

- <u>Utility Owned and Operated Multi-Family Dwelling Charging</u>: As proposed by the Companies, each Company shall install, own and operate a network of up to 240 multifamily dwelling (MFD) L2 stations (for a total of 480 L2 stations). Operation and maintenance of L2 stations may be performed by qualified third-party service provider(s) by agreement with Company. Charging stations will be installed at MFD locations in the Company's North Carolina service territory to enable residential charging at MFD in underserved areas and build driver confidence in EVs, with site selection specifically targeted to MFD in low-to-moderate income and rural communities. Charging services will be available to all electric vehicle owners without preference to Company's electric service customers.⁸
- <u>Utility Owned and Operated Highway Corridor Fast Charging</u>: As proposed by the Companies, each Company shall install, own and operate a network of up to 90 DCFC stations across approximately 45 individual locations (for a total of 180 DCFC stations across approximately 90 individual locations). Operation and maintenance of DCFC stations may be performed by third-party qualified service provider(s) by agreement with Company. Charging stations will be dispersed at key highway corridor locations throughout Company's North Carolina service territory to enable intra- and inter-state electric vehicle travel and build driver confidence in EVs. Charging services will be available to all electric vehicle owners without preference to Company's electric service customers.⁹
- <u>Utility Owned and Operated EV School Bus Program</u>: As proposed by the Companies, this program will be available to customers operating public school transportation systems in each Company's North Carolina electric service territory. Participants must utilize one or more Electric Vehicle School Bus ("EVSB") and provide transportation services to a public-school system. Incentives are available for no more than 60 buses operated by a single or multiple school systems in each Company's service territory (for a total of 120 EVSBs). The Company's shall fund up to \$225,000 per bus procurement, delivery and installation of EVSB. Customer will own EVSB and shall operate and maintain all EVSB components for the duration of the Phase 2 pilot. Company will retain ownership rights to EVSB battery and shall be allowed to repurpose or remove EVSB battery at the end of its useful life. Customer may simultaneously participate in and receive revenue credits pursuant to the Electric Vehicle Make Ready Infrastructure Program.¹⁰

III. The Companies' Pending Make Ready Credit Programs Application.

On July 8, 2021, ChargePoint and other parties submitted initial comments on the Companies' proposed Make Ready Credit (MRC) Programs submitted for Commission review

⁸ Application, Attachment E, p. 1; Application, Attachment F, p. 1.

⁹ Application, Attachment G, p. 1; Application, Attachment H, p. 1.

¹⁰ Application, Attachment I, p. 1; Application, Attachment J, p. 1.

and approval on April 30, 2021. As ChargePoint stated in those comments, utility investment in EV charging infrastructure should complement the competitive market.¹¹

Utilities are well-suited to assist in the growth of a competitive, sustainable EV charging ecosystem. ChargePoint believes the Commission should authorize strategic, risk-averse activities and cost-effective, ratepayer-funded infrastructure investments by utilities that will help accelerate expansion of EV charging and EV adoption in North Carolina.

The investment models used by utilities have taken many forms, and some have included a portfolio of approaches. In ChargePoint's experience, the most successful programs focus on make-ready investment by the utility along with rebates toward the EV charging stations or rebates toward the installation and construction costs of the EVSE.¹²

ChargePoint believes that there are three components of effective utility investment to support a long-term, sustainable competitive market:

- The ability for site hosts to choose among multiple, qualified vendors of charging equipment and networks.
- Site host operational control of EV charging infrastructure located on their properties, including controls over pricing of the charging service provided to drivers.
- Private investment in EV charging infrastructure in the form of shared cost with incentives, rebates, or supplemented project funding.

¹¹ See ChargePoint Initial Comments (July 8, 2021).

¹² See, e.g., Alternate Proposed Decision Regarding Southern California Edison Company's Application for Charge Ready and Market Education Programs, CPUC, Docket No. A.14-10-014, (Jan. 16, 2016), available at: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M157/K682/157682806.PDF; Petition of the Electric Vehicle Work Group for Implementation of a Statewide Electric Vehicle Portfolio, Case No. 9478, Order No. 88997, (MPSC Jan. 14, 2019), available at: https://www.psc.state.md.us/wp-content/uploads/Order-No.-88997-Case-No.-9478-EV-Portfolio-Order.pdf; Decision Directing PG&E to Establish an Electric Vehicle Infrastructure and Education Program, CPUC, Docket No. 16-12-065 (Dec. 21, 2016); Massachusetts Department of Public Utilities. Docket 17-05. "Order Establishing Eversource's Revenue Requirement." November 30, 2017. (available at https://eeaonline.eea.state.ma.us/EEA/FileService/V1.4.0/FileService.Api/file/FileRoom/dehehcji); New York Public Service Commission. Matter No. 17-00887. "Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Niagara Mohawk Power Corporation d/b/a National Grid for Electric Service." (available at http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=17-E-0238) (utility-provided make-ready coupled with EVSE rebates provided by NYSERDA).

All three components relate to the following core outcomes that will drive the competitive market in the long-term: (1) the variety of technology choices available to the market, (2) the degree to which site hosts can make choices about how to operate the charging stations deployed on their property, and (3) the impact of spurring private investment in the deployment. ChargePoint believes that these best practices are critical features of cohesive, complementary utility programs for EV charging infrastructure. Unfortunately, as proposed, the Companies' Phase II Pilot programs do not align with best market practices, and will actually *undermine* the competitive market for EV charging in North Carolina, increase costs and risks to ratepayers, and restrict choices for customers.

COMMENTS

I. The Companies' Phase II Pilot Programs are largely extensions of the Phase I Electric Transportation pilots previously approved by the Commission.

In 2019, the Companies filed their Electric Transportation ("ET") pilot programs ("Phase I Pilots"). As stated by the Company, the goals of the Phase I pilots were, in part, to (1) Install a foundational level of fast charging infrastructure across the Companies' service territories in North Carolina and (2) investigate the capabilities of electric school buses to provide bi-directional power and resilience benefits as potential mobile back up power sources.¹³

The Companies state in their Application that "[t]he purpose of this Phase 2 pilot program is for the Company to develop and maintain a foundational network of publicly accessible Direct Current Fast Charge (DCFC) electric vehicle (EV) charging stations to support EV adoption and serve the growing charging needs of Customers across the Company's North Carolina service territory." The Companies further state that "[t]he purpose of this Phase 2 pilot program is to

¹³ See Duke Energy Carolinas, LLC and Duke Energy Progress, LLC's Application for Approval of Proposed Electric Transportation Pilot Docket Nos. E-2, Sub 1197 and E-7, Sub 1195 (Mar. 29, 2019) ("Phase I Application"). (pp. 7-8.)

¹⁴ Application, Attachment G, p. 1; Application, Attachment H, p. 1.

support procurement of Electric Vehicle School Buses (EVSB) by public school transportation systems to facilitate market adoption, collect utilization and other load characteristics to understand grid and utility impacts, and explore the potential for vehicle-to-grid power flow from EVSB batteries."¹⁵

Further, in its ET Order, the Commission stated its expectation that the Companies "explore...additional ownership and partnership models for EV infrastructure, including utility fully owned and operated stations; make-ready stations with third-party owned charging equipment; and stations co-owned, co-funded, or co-operated by Duke in partnership with other entities." However, contrary to the Commission's Order requiring the use of "additional ownership" models, the Companies have only proposed Phase II Pilots that result in utility ownership of EVSE.

Based on the forgoing, ChargePoint believes that the Companies' Phase II Pilot programs (1) fail to meet the criteria set by the Commission in its ET Order and (2) that the Companies' Phase II Pilot programs fail to build upon the Commission-approved Phase I pilots. In the ET Order, the Commission stated that it "is not sanctioning an open-ended or broad, general participation by Duke in the EV charging infrastructure market." However, rather than develop and propose Phase II Pilot programs that provide additional information for the Commission, the Companies, ratepayers, and EV drivers, the Companies' simply propose utility ownership and operation of more EVSE in the same market segments as the Phase I pilots already approved by the Commission.

¹⁵ Application, Attachment I, p. 1; Application J, p. 1.

¹⁶ ET Order, pp. 18 -19.

¹⁷ ET Order, p. 19.

II. ChargePoint's recommended modifications to the Phase II Pilot programs

As noted previously, ChargePoint strongly encourages utility investment in charging infrastructure and electrification programs that support rather than conflict with the competitive market. While ChargePoint believes the Phase II Pilot programs should not be approved, should the Commission choose to approve the Companies' proposals, we respectfully recommend several modifications intended to further support increased competitive deployment of EV charging infrastructure throughout the Companies' service territory.

a. The competitive market currently provides alternatives to utility ownership of EVSE for site hosts that do not desire to own EVSE

The Companies' Phase II Pilot programs rely exclusively on utility-owned EV charging stations. Further, in every program except the EVSE Tariff Pilot, the Companies, not the site host, will operate the charging station. The Companies provide no justification for only proposing utility ownership and largely eliminating third-party or site host ownership and operation of the EVSE. While ChargePoint can only speculate as to the Companies' rational for designing these Phase II Pilot programs in this manner, we acknowledge that there may be instances where a site host would like to have charging options on their property but cannot or does not want to own or operate the charging infrastructure. In these cases, utility ownership is not the only solution. The private sector offers many different business models and products to provide turnkey solutions for site hosts, coordinating all aspects of the charging experience from installation to operation and maintenance, including solutions for site hosts that are not seeking to own or operate their own charging equipment. For example, ChargePoint offers customers a subscription solution for EV charging, "ChargePoint as a Service" ("CPaaS") that is similar to "Software as a Service" ("SaaS") models, which offer access to smart solutions at a reduced cost through subscription pricing. Under the CPaaS option, ChargePoint coordinates the installation, operation, and any needed maintenance of the charging infrastructure, providing a single point of contact for site hosts and drivers using the station. Make ready programs, and/or customer rebates for charging equipment, can enable this type of third-party ownership offering by reducing installation costs and helping to reduce the subscription cost to site hosts.

Should the Commission approve the Companies' Phase II Pilot programs, ChargePoint respectfully recommends that the Commission direct the Companies' to revise their Public Level 2, MFD and Highway Corridor Pilot Programs to expressly allow for third party turnkey solutions.

b. The Commission should direct the Companies to revise all Phase II Pilot programs to explicitly provide site host choice in EVSE hardware and network software

The Companies state that "to address concerns around the continuing development of competition among hardware and software providers, participating site hosts shall have the choice of at least two (2) vendors of EV charging hardware and software." However, the Companies limit the ability for site hosts to choose the EV charging solution that works best for them to the Highway Corridor Fast Charging program. The Companies do not provide any explanation or justification for limiting site hosts choice to only one Phase II Pilot program. Further, the proposed tariffs included in the Companies' Application do not explicitly provide site hosts the ability to choose from at least two vendors of EV charging hardware and software.

As discussed previously, one of the main pillars of effective utility investment is the ability for site hosts to choose among multiple, qualified vendors of charging equipment and network software in order to find the best solution for their specific needs. Protecting customers' ability to choose their preferred solution — rather than providing a "one-size, fits-all" solution — is essential to protecting the competitive market for EV charging stations in North Carolina. When customers can choose the charging solution that works best for them, charging solution vendors will compete

¹⁸ Application, p. 18.

to make high-quality, innovative products that customers want. Creating ongoing competition between vendors through customer choice within utility programs is essential to ensuring that a competitive market can thrive within utility programs and sustainably continue after they cease.

ChargePoint recommends the Commission direct the Companies to provide site hosts the ability to choose from at least two (2) vendors of EV charging hardware and software for all Phase II Pilot programs. Further, the Commission should direct the Companies to include appropriate tariff language to implement customer choice as to ownership and operation of EVSE. ChargePoint provides recommended changes to the proposed tariffs in Appendix CP-1.

c. The Commission should direct the Companies to revise all Phase II Pilot programs to explicitly empower site hosts to establish pricing and pricing policies for EV charging services

In their Application, the Companies "propose an assessment of a fee to drivers consisting of the approximate average statewide Fast Charge price per kWh ("Fast Charge Fee"). After 12 months of the Fast Charge being in service, the site hosts will have the option of creating alternative pricing mechanisms for drivers, which, for purposes of this Phase II Pilot, may not exceed the Fast Charge Fee by more than twenty percent." However, the Companies appear to also limit the ability for site hosts to establish pricing and pricing policies to only the Highway Corridor Fast Charging program. Again, the Companies do not provide any explanation or justification for limiting site hosts ability to establish pricing for EV charging services to a singular Phase II Pilot program. Further, the proposed tariffs included in the Companies' Application do not explicitly provide site hosts ability to establish pricing for EV charging services.

ChargePoint recommends the Commission direct the Companies to clarify that all site hosts participating in the Companies' Phase II Pilot programs have the ability to establish the prices and

¹⁹ Application, p. 18.

pricing policies for EV charging services located on their property. Site host ability to establish and set pricing is important to ensuring that site hosts can achieve their unique goals for hosting EV charging stations. For example, a restaurant may offer free or discounted charging for the first hour to attract customers, while a library may charge a fee for all charging sessions to ensure they recover the cost of electricity. Some site hosts might prefer a flat fee or a per-minute fee, while others may prefer a per-kWh price. Site hosts should be free to set prices and change prices as they see fit to support their goals. Ultimately this will encourage site hosts to maximize station utilization through signage, parking enforcement, maintenance, and pricing.

Further, ChargePoint strongly recommends that the Commission direct the Company to remove the requirement that site hosts must wait a minimum of 12 months to create "alternative pricing mechanisms" for EV charging services. The Companies fail to provide any justification for requiring a 12-month waiting period, which is a long enough time period for many EV drivers' expectations to be set and to dissuade site hosts from actively participating in the pricing for EVSE services to optimize the driver experience. If an EV driver has a negative experience with the Company's "Fast Charge Fee" at a site host's EVSE, they may never return to that station, even if the site host later changes the pricing structure.

ChargePoint further recommends that the Commission direct the Companies to include appropriate tariff language to allow site hosts the ability to establish and adjust pricing for EV charging services. ChargePoint provides recommended changes to the proposed tariffs in Appendix CP-1.

d. The Commission should direct the Companies to revise the EVSE Tariff Pilot to require networked EVSE

ChargePoint recommends that the Companies and the Commission require any EV chargers installed through the EVSE Tariff Pilot to be networked. Networked or smart chargers

will be vital to ensure that EV charging benefits the distribution grid by enabling customers, the Companies and third parties to have advanced load management capabilities to facilitate off-peak charging and other managed charging strategies. A smart charger can also collect interval data to inform usage patterns and provide enhanced network communication capabilities between the EV driver and the utility, or third-party systems. These capabilities can be of significant importance to site hosts to enable charging services at their facilities, as well as to utilities and third-party providers since the smart station can enable various demand side management programs. Those programs could include demand response or enable a TOU rate specific to EV charging through utilization of the embedded meter. The associated communication and cloud-based technology platform can also be leveraged to provide enhanced station management features like reservations or notifications for charge completion for an improved driver experience through greater visibility and interaction.

Requiring smart charger capabilities now will future-proof investment in EV charging infrastructure. By requiring smart chargers from the outset, the Commission and the Companies will enable the Companies', third-party providers, vendors, and customers to reap significant benefits from increased functionality and wider future program design options.

ChargePoint recommends that the Commission direct the Companies to modify the EVSE Tariff Pilot to remove the reference to non-networked EVSE. ChargePoint provides recommended changes to the proposed tariffs in Appendix CP-1.

e. The Companies should require EVSE deployed through the Phase II Pilots to accept credit card payments, but not mandate the method of processing payment

The Companies have proposed that EVSE qualified for the Public L2, MFD, and the Public DCFC programs shall enable payment to the Companies by "Smart Phone App, Radio-frequency

identification (RFID) Card or by Credit Card swipe at the site.²⁰ ChargePoint agrees that EVSE qualified for the Phase II Pilots should support multiple payment options, including the ability pay via credit card. However, we urge the Commission to reject the requirement that qualified EVSE enable payment by credit card "swipe".

The Commission and the Companies should avoid being overly prescriptive with respect to payment methods and should encourage flexibility at this stage of the market. Rather than require EVSE to accept credit card payment solely via "swipe," ChargePoint recommends that the Commission direct the Company to modify the program requirements to require EVSE to accept credit card payment via "swipe, chip, or contactless". ChargePoint provides recommended changes to the proposed tariffs in Appendix CP-1.

CONCLUSION

ChargePoint thanks the Commission for the opportunity to comment on the Companies' proposed Phase II Pilot programs, and for its consideration of transportation electrification programs generally. ChargePoint respectfully requests the Commission's consideration of ChargePoint's comments and the adoption of programs that will support a long-term sustainable and competitive market for the installation and operation of electric vehicle charging infrastructure in North Carolina. ChargePoint looks forward to participating and contributing to future discussions with other interested parties and stakeholders on how to effectively use competitive forces to achieve beneficial transportation electrification.

²⁰ Application, Attachment C, p. 1; Application, Attachment D, p. 1; Application, Attachment E, p. 1; Application, Attachment F, p. 1; Application, Attachment H, p. 1.

Respectfully submitted this 29 day of July, 2021.

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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Comments of ChargePoint, Inc. filed in Docket Nos. E-2, Sub 1197 and E-7, Sub 1195 was served electronically or via U.S. mail, first-class postage prepaid, upon all parties of record.

This the 29th day of July, 2021.

Joseph W. Eason

Counsel for ChargePoint, Inc.

Duke Energy Carolinas, LLC

ATTACHMENT A
Electricity No. 4
North Carolina Original Leaf No. 254

SCHEDULE EVSE (PILOT) Electric Vehicle Service Equipment

AVAILABILITY (North Carolina Only)

Available to the individual Customer for electric vehicle charging infrastructure at locations on the Company's distribution system. If safety, reliability, or access hinders delivery of service under this Schedule, service may be withheld or discontinued until such hindrances are remedied.

This pilot is available for networked or non-networked Electric Vehicle Service Equipment ("EVSE" or "Charger"). Networked EVSE contains wi-fi, cellular, or other communications capabilities to connect to the internet for communications, data gathering, and charging load management purposes by the Customer and/or the Company. The Company may provide programs and/or services to help Customers manage charging during off-peak hours. Participating site hosts shall have the choice of at least two (2) vendors of EV charging hardware and software which shall be prequalified by the Company to meet functional requirements. Site hosts shall retain the ability to set pricing for EV charging services.

RATE:

(A) Level 2 ("L2") EVSE

L2 charging infrastructure will be billed for installations of standard equipment installed on the Customer's side of the meter on the Company's distribution system. The rates below include equipment, maintenance, and annual software networking fees, but do not include the monthly charges for extra facilities associated with the Company's Service Regulations and/or Line Extension Plan, electrical panel/wiring make-ready costs, costs for work on the Company's side of the meter, non-standard equipment, or any contribution required under this Schedule. Internet connectivity, arranged by the Customer and at the Customer's expense, may be required for Customers to participate in certain Company programs that may be offered in conjunction with other Company tariffs. Customers may choose any applicable rate schedule for electricity service.

(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

(B) <u>Direct-Current Fast Charging ("DCFC") Equipment (Non-Residential)</u>

DCFC infrastructure will be billed for installations of standard equipment installed on the Customer's side of the meter on the Company's distribution system. The rates below include equipment, maintenance, and annual software networking fees, but do not include the monthly charges for extra facilities associated with the Company's Service Regulations and/or Line Extension Plan, electrical panel/wiring make-ready costs, costs for work on the Company's side of the meter, non-standard equipment, or any contribution required under this Schedule. Internet connectivity, arranged by the Customer and at the Customer's expense, may be required for Customers to participate in certain Company programs that may be offered in conjunction with other Company tariffs. Customers may choose any applicable rate schedule for electricity service.

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Effective for service rendered on and after	
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SCHEDULE EVSE (PILOT) Electric Vehicle Service Equipment

EVSE Description	kW range	Mounting	EVSE Monthly Rate
DCFC24 Networked with CCS-1 and CHAdeMO Cables, LED Display, Cellular Modem, Cable Management Hoister, Includes Software	24 kW	Outside Wall	\$371.81
DCFC50 Networked with CCS-1 and CHAdeMO Cables, High Resolution Touch Screen Display, Cellular Modem, Cable Management Hoister, Includes Software	50 kW	Customer's Pad	\$589.11
DCFC75 Networked with CCS-1 and CHAdeMO Cables, High Resolution Touch Screen Display, Cellular Modem, Cable Management Hoister, Includes Software	75 kW	Customer's Pad	\$832.55
DCFC100 Networked with CCS-1 and CHAdeMO Cables, High Resolution Touch Screen Display, Cellular Modem, Cable Management Hoister, Includes Software	100 kW	Customer's Pad	\$1,249.03
DCFC150 Networked with CCS-1 and CHAdeMO Cables, High Resolution Touch Screen Display, Cellular Modem, Cable Management Hoister, Includes Software	150 kW	Customer's Pad	\$1,543.52
DCFC350	350 kW	Customer's Pad	TBD

(C) Pedestal or Pole Mounting

A special EVSE pedestal or pole is any Company-owned pedestal or pole installed as a part of an electric vehicle charging system and on which no other Company overhead distribution facilities are installed. A Customer may choose to integrate electric vehicle charging infrastructure with facilities that provide outdoor lighting services pursuant to the provisions contained within the Company's outdoor lighting service tariffs.

Mounting Description	Monthly Mounting
	Rate
Level 2 – Outdoor EVSE Mount	\$6.36
(Residential)	
Level 2 – Universal Pedestal (Non-	\$13.18
Residential)	
30ft Standard Wood Pole (Non-	\$6.94
Residential)	
Protective Concrete Bollard (Non-	\$6.69
Residential)	
Cable Management Hoister (Non-	\$11.57
Residential)	

(D) Make-Ready Upgrades

To receive service under this Schedule, Customers may need to upgrade their electrical panel/wiring on the Customer's side of the meter prior to the installation of L2 and/or DCFC infrastructure. The EVSE Monthly Rate listed does not include estimated electrical panel/wiring make-ready costs.

For L2 and/or DCFC electrical panel/wiring upgrades, a one-time non-refundable contribution will be made by the Customer for the costs above any make-ready incentives the Company may offer, and the Customer has applied for and received. The electrical panel/wiring upgrades on the Customer's side of the meter remain the property of the Customer.

Wiring upgrades on the Company's side of the meter are subject to the Company's Line Extension Policy.

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SCHEDULE EVSE (PILOT) Electric Vehicle Service Equipment

(E) Distribution Extra Facilities

In addition to the EVSE Monthly Rate, Customer shall pay a Distribution Extra Facilities charge when distribution facilities are requested that exceed distribution facilities normally supplied by the Company to render charging service. Customer shall pay a Distribution Extra Facilities charge of 1.0 percent per month, but not less than \$25 per month, of the estimated original installed cost of the Distribution Extra Facilities. Distribution Extra Facilities that are above normal include, but are not limited to, the following:

- Any distribution transformer and/or primary conductor extension.
- Installing underground circuit to deliver energy service to the EVSE.
- Distribution-related work before the point of delivery as defined in the Company's Service Regulations.

(F) EVSE Extra Facilities

In addition to the EVSE Monthly Rate, Customer shall pay an EVSE Extra Facilities charge when facilities are requested that exceed EVSE facilities normally supplied by the Company to render charging service. EVSE Extra Facilities are defined as EVSE-related facilities that are optional services chosen by the Customer to customize EVSE operation. Customer shall pay an EVSE Extra Facilities charge of 1.7 percent per month of the estimated original installed cost of the EVSE Extra Facilities. EVSE Extra Facilities that are above normal include, but are not limited to, the following:

- Non-standard EVSE not included in the EVSE Monthly Rate provision above. The EVSE Extra Facilities shall
 be the difference between the estimated installed cost of the non-standard EVSE and the estimated installed
 cost of the equivalent standard EVSE.
- Extra Cords.
- Any special EVSE mounting facilities not included in the Monthly Mounting Rate or provided for in the EVSE Monthly Charge.

(G) Non-Refundable Contribution

- If conditions require the use of materials and methods of installation other than the Company's experimental materials and methods under this pilot, the Customer will contribute additional cost. Experimental materials and methods are those that are reasonably necessary to delivery service as described in the provisions above.
- The Customer will contribute the estimated cost of installing cables and conduit under paved or landscaped surface areas; however, Customer may cut and replace the pavement or surface in lieu of making the contribution.
- Service supplied under the Monthly Rates listed above does not include the conversion of existing overhead circuits to underground. Should the Customer desire such a conversion under this Schedule, the Customer shall pay, in addition to the applicable contribution and charges herein, the estimated net investment depreciated, plus removal costs, less salvage value of the overhead conductor being removed.

EXPLANATORY NOTES AND OTHER CHARGES

- (1) The Company will readily maintain, as soon as practical, the EVSE during working hours (7 AM to 7 PM) following notification by the Customer. After hours service is available from 7 PM to 7 AM at a cost of \$77 per trip.
- (2) At the request of the Customer, the Company shall remove or move L2 EVSE, as required by the Customer, at a cost of \$77 per removal/move for residential Customers or \$117 per removal/move for non-residential Customers. Due to the varied cost of DCFC EVSE, the Company will perform a cost of removal/move calculation based on actual costs to remove/move DCFC EVSE to determine applicable charges.
- (3) The installation of EVSE shall be in a location that is readily accessible by the Company truck to support installation and maintenance of Company facilities. The Company reserves the right to refuse service if is not physically feasible to offer service and/or maintain charging equipment.
- (4) The Customer owns any electrical panel/wiring on the Customer's side of the meter. The Company does not warrant any electrical panel/wiring make-ready work on the Customer's side of the meter.

GENERAL

Service rendered under this Schedule is subject to the provisions of the Company's Service Regulations filed with the state regulatory commission.

North Carolina Original Leaf No. 254
Effective for service rendered on and after
NCUC Docket No. E-7, Sub 1195, Order Dated

SCHEDULE EVSE (PILOT) Electric Vehicle Service Equipment

SALES TAX

To the above charges will be added any applicable North Carolina Sales Tax.

PAYMENT

Bills under this Schedule are due and payable on the date of the bill at the office of the Company. Bills are past due and delinquent on the twenty-fifth day after the date of the bill. If any bill is not so paid, the Company has the right to suspend service. In addition, all bills not paid by the twenty-fifth day after the date of the bill shall be subject to a one percent (1%) overdue payment charge on the unpaid amount. This overdue payment charge shall be rendered on the following month's bill, and it shall become part of, and be due and payable with, the bill on which it is rendered.

CONTRACT PERIOD

The original term of contract may be from a minimum of three (3) years to a maximum of ten (10) years. Contracts will continue after the original term until terminated by either party on thirty days' written notice. The Customer may amend or terminate the Agreement before the expiration of the initial Contract Period by paying to the Company a sum of money equal to 40% of the monthly bills which otherwise would have been rendered for the remaining term of the initial Contract Period. The Company may require a deposit not to exceed 40% of the revenue for the original term. The deposit will be returned at the end of the original term, provided the Customer has met all provisions of the contract. Minimum term of contract for specific situations shall be:

- (a) Three years for Level 2 charging infrastructure installed at a residence and designated by the Company as standard equipment and mounted on a wall.
- (b) Five years for Level 2 charging infrastructure at a location other than a residence and designated by the Company as standard equipment mounted on a wall, pedestal, pole, or pad.
- (c) Ten years for DCFC infrastructure installed and designated by the Company as standard equipment mounted on a wall, pedestal, pole, or pad.
- (d) Ten years for Level 2 charging and DCFC infrastructure designated by the Company as non-standard and/or installations including Extra Facilities as described in Rate paragraphs (E) and (F) above.

SCHEDULE EVSE PILOT Electric Vehicle Service Equipment (NC)

AVAILABILITY

Available to the individual Customer for electric vehicle charging infrastructure at locations on the Company's distribution system. If safety, reliability, or access hinders delivery of service under this Schedule, service may be withheld or discontinued until such hindrances are remedied.

This pilot is available for networked or non-networked Electric Vehicle Service Equipment ("EVSE" or "Charger"). Networked EVSE contains wi-fi, cellular, or other communications capabilities to connect to the internet for communications, data gathering, and charging load management purposes by the Customer and/or the Company. The Company may provide programs and/or services to help Customers manage charging during off-peak hours. Participating site hosts shall have the choice of at least two (2) vendors of EV charging hardware and software which shall be prequalified by the Company to meet functional requirements. Site hosts shall retain the ability to set pricing for EV charging services.

RATE:

(A) Level 2 ("L2") EVSE

L2 charging infrastructure will be billed for installations of standard equipment installed on the Customer's side of the meter on the Company's distribution system. The rates below include equipment, maintenance, and annual software networking fees, but do not include the monthly charges for extra facilities associated with the Company's Service Regulations and/or Line Extension Plan, electrical panel/wiring make-ready costs, costs for work on the Company's side of the meter, non-standard equipment, or any contribution required under this Schedule. Internet connectivity, arranged by the Customer and at the Customer's expense, may be required for Customers to participate in certain Company programs that may be offered in conjunction with other Company tariffs. Customers may choose any applicable rate schedule for electricity service.

(1) Residential

EVSE Description	kW ranges	Mounting	EVSE Monthly Rate
Non-Networked 32A 240V EVSE 25ft Cord	Up to 9.6 kW	Inside Wall	\$12.59
Networked 32A 240V EVSE 25ft Cord Includes Software	Up to 9.6 kW	Inside Wall	\$16.24

(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	\$17.01
Networked Client 40A 240V EVSE, 25ft Cord, Includes Software	6 to 9.6 kW	Outside Wall	\$71.97
Networked Gateway 40A 240V EVSE, 25ft Cord, Includes Software	6 to 9.6 kW	Outside Wall	\$83.13

(B) Direct-Current Fast Charging ("DCFC") Equipment (Non-Residential)

DCFC infrastructure will be billed for installations of standard equipment installed on the Customer's side of the meter on the Company's distribution system. The rates below include equipment, maintenance, and annual software networking fees, but do not include the monthly charges for extra facilities associated with the Company's Service Regulations and/or Line Extension Plan, electrical panel/wiring make-ready costs, costs for work on the Company's side of the meter, non-standard equipment, or any contribution required under this Schedule. Internet connectivity, arranged by the Customer and at the Customer's expense, may be required for Customers to participate in certain Company programs that may be offered in conjunction with other Company tariffs. Customers may choose any applicable rate schedule for electricity service.

Schedule EVSE Pilot Sheet 1 of 4

SCHEDULE EVSE PILOT Electric Vehicle Service Equipment (NC)

EVSE Description	kW range	Mounting	EVSE Monthly Rate
DCFC24 Networked with CCS-1 and CHAdeMO Cables, LED Display, Cellular Modem, Cable Management Hoister, Includes Software	24 kW	Outside Wall	\$367.77
DCFC50 Networked with CCS-1 and CHAdeMO Cables, High Resolution Touch Screen Display, Cellular Modem, Cable Management Hoister, Includes Software	50 kW	Customer's Pad	\$582.89
DCFC75 Networked with CCS-1 and CHAdeMO Cables, High Resolution Touch Screen Display, Cellular Modem, Cable Management Hoister, Includes Software	75 kW	Customer's Pad	\$823.49
DCFC100 Networked with CCS-1 and CHAdeMO Cables, High Resolution Touch Screen Display, Cellular Modem, Cable Management Hoister, Includes Software	100 kW	Customer's Pad	\$1,235.83
DCFC150 Networked with CCS-1 and CHAdeMO Cables, High Resolution Touch Screen Display, Cellular Modem, Cable Management Hoister, Includes Software	150 kW	Customer's Pad	\$1,527.22
DCFC350	350 kW	Customer's Pad	TBD

(C) Pedestal or Pole Mounting

A special EVSE pedestal or pole is any Company-owned pedestal or pole installed as a part of an electric vehicle charging system and on which no other Company overhead distribution facilities are installed. A customer may choose to integrate electric vehicle charging infrastructure with facilities that provide outdoor lighting services pursuant to the provisions contained within the Company's outdoor lighting service tariffs.

Mounting Description	Monthly Mounting Rate
Level 2 – Outdoor EVSE Mount	\$6.29
(Residential)	
Level 2 – Universal Pedestal (Non-	\$13.04
Residential)	
30ft Standard Wood Pole (Non-	\$5.05
Residential)	
Protective Concrete Bollard (Non-	\$6.77
Residential)	
Cable Management Hoister (Non-	\$11.45
Residential)	

(D) Make-Ready Upgrades

To receive service under this Schedule, customers may need to upgrade their electrical panel/wiring on the Customer's side of the meter prior to the installation of L2 and/or DCFC infrastructure. The EVSE Monthly Rate listed does not include estimated electrical panel/wiring make-ready costs.

For L2 and/or DCFC electrical panel/wiring upgrades, a one-time non-refundable contribution will be made by the customer for the costs above any make-ready incentives the Company may offer, and the customer has applied for and received. The electrical panel/wiring upgrades on the customer's side of the meter remain the property of the customer.

Wiring upgrades on the Company's side of the meter are subject to the Company's Line Extension Policy.

Schedule EVSE Pilot Sheet 2 of 4

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SCHEDULE EVSE PILOT Electric Vehicle Service Equipment (NC)

(E) <u>Distribution Extra Facilities</u>

In addition to the EVSE Monthly Rate, Customer shall pay a Distribution Extra Facilities charge when distribution facilities are requested that exceed distribution facilities normally supplied by the Company to render charging service. Customer shall pay a Distribution Extra Facilities charge of 1.0 percent per month but not less than \$25 per month of the estimated original installed cost of the Distribution Extra Facilities. Distribution Extra Facilities that are above normal include, but are not limited to, the following:

- Any distribution transformer and/or primary conductor extension.
- Installing underground circuit to deliver energy service to the EVSE.
- Distribution-related work before the point of delivery as defined in the Company's Service Regulations.

(F) EVSE Extra Facilities

In addition to the EVSE Monthly Rate, Customer shall pay an EVSE Extra Facilities charge when facilities are requested that exceed EVSE facilities normally supplied by the Company to render charging service. EVSE Extra Facilities are defined as EVSE-related facilities that are optional services chosen by the Customer to customize EVSE operation. Customer shall pay an EVSE Extra Facilities charge of 1.7 percent per month of the estimated original installed cost of the EVSE Extra Facilities. EVSE Extra Facilities that are above normal include, but are not limited to, the following:

- Non-standard EVSE not included in the EVSE Monthly Rate provision above. The EVSE Extra Facilities shall
 be the difference between the estimated installed cost of the non-standard EVSE and the estimated installed
 cost of the equivalent standard EVSE.
- Extra Cords.
- Any special EVSE mounting facilities not included in the Monthly Mounting Rate or provided for in the EVSE Monthly Charge.

(G) Non-Refundable Contribution

- If conditions require the use of materials and methods of installation other than the Company's experimental materials and methods under this pilot, the customer will contribute additional cost. Experimental materials and methods are those that are reasonably necessary to delivery service as described in the provisions above.
- The customer will contribute the estimated cost of installing cables and conduit under paved or landscaped surface areas; however, Customer may cut and replace the pavement or surface in lieu of making the contribution.
- Service supplied under the Monthly Rates listed above does not include the conversion of existing overhead
 circuits to underground. Should the customer desire such a conversion under this Schedule, the customer shall
 pay, in addition to the applicable contribution and charges herein, the estimated net investment depreciated,
 plus removal costs, less salvage value of the overhead conductor being removed.

EXPLANATORY NOTES AND OTHER CHARGES

- (1) The Company will readily maintain, as soon as practical, the EVSE during working hours (7 AM to 7 PM) following notification by the Customer. After hours service is available from 7 PM to 7 AM at a cost of \$77 per trip.
- (2) At the request of the Customer, the Company shall remove or move L2 EVSE, as required by the Customer, at a cost of \$77 per removal/move for residential Customers or \$117 per removal/move for non-residential Customers. Due to the varied cost of DCFC EVSE, the Company will perform a cost of removal/move calculation based on actual costs to remove/move DCFC EVSE to determine applicable charges.
- (3) The installation of EVSE shall be in a location that is readily accessible by the Company truck to support installation and maintenance of Company facilities. The Company reserves the right to refuse service if is not physically feasible to offer service and/or maintain charging equipment.
- (4) The customer owns any electrical panel/wiring on the customer's side of the meter. The Company does not warrant any electrical panel/wiring make-ready work on the customer's side of the meter.

GENERAL

Service rendered under this Schedule is subject to the provisions of the Company's Service Regulations filed with the state regulatory commission.

SALESTAX

To the above charges will be added any applicable North Carolina Sales Tax.

Schedule EVSE Pilot Sheet 3 of 4

SCHEDULE EVSE PILOT Electric Vehicle Service Equipment (NC)

PAYMENT

Bills under this Schedule are due and payable on the date of the bill at the office of the Company. Bills are past due and delinquent on the twenty-fifth day after the date of the bill. If any bill is not so paid, the Company has the right to suspend service. In addition, all bills not paid by the twenty-fifth day after the date of the bill shall be subject to a one percent (1%) overdue payment charge on the unpaid amount. This overdue payment charge shall be rendered on the following month's bill, and it shall become part of, and be due and payable with, the bill on which it is rendered.

CONTRACT PERIOD

The original term of contract may be from a minimum of three (3) years to a maximum of ten (10) years. Contracts will continue after the original term until terminated by either party on thirty days' written notice. The Customer may amend or terminate the Agreement before the expiration of the initial Contract Period by paying to the Company a sum of money equal to 40% of the monthly bills which otherwise would have been rendered for the remaining term of the initial Contract Period. The Company may require a deposit not to exceed 40% of the revenue for the original term. The deposit will be returned at the end of the original term, provided the Customer has met all provisions of the contract. Minimum term of contract for specific situations shall be:

- (a) Three years for Level 2 charging infrastructure installed at a residence and designated by the Company as standard equipment and mounted on a wall.
- (b) Five years for Level 2 charging infrastructure at a location other than a residence and designated by the Company as standard equipment mounted on a wall, pedestal, pole, or pad.
- (c) Ten years for DCFC infrastructure installed and designated by the Company as standard equipment mounted on a wall, pedestal, pole, or pad.
- (d) Ten years for Level 2 charging and DCFC infrastructure designated by the Company as non-standard and/or installations including Extra Facilities as described in Rate paragraphs (E) and (F) above.

Effective for service rendered on an after NCUC Docket No. E-2, Sub 1197

Schedule EVSE Pilot Sheet 4 of 4

PUBLIC LEVEL 2 CHARGING STATION PROGRAM, PHASE 2 (NC PILOT)

PURPOSE

The purpose of this pilot program is for the Company to develop and maintain a foundational network of publicly accessible Level 2 (L2) electric vehicle (EV) charging stations to support EV adoption and serve the growing charging needs of Customers in the Company's North Carolina service territory.

AVAILABILITY

Company shall install, own and operate a network of up to 240 L2 stations. Participating site hosts shall have the choice of at least two (2) vendors of EV charging hardware and software which shall be prequalified by the Company to meet functional requirements. Operation and maintenance of L2 stations may be performed by a qualified third-party service provider by agreement with Company. Charging stations will be installed at key publicly accessible locations in Company's North Carolina service territory to enable charging in the public sector in underserved areas and build driver confidence in EVs, with site selection specifically targeted to low-to-moderate income and rural communities. Company will give priority to installations located in U.S. postal codes that do not have existing access to public EV charging. Charging services will be available to all electric vehicle owners without preference to Company's electric service customers.

CHARGING STATION EQUIPMENT

The L2 stations shall include charging equipment with electrical demand requirements of up to 10 kW. Each location shall include a minimum of two and a maximum of eight L2 Electric Vehicle Supply Equipment (EVSE) stations capable of charging compatible plug-in EVs intended for use on public streets and highways. Additionally, EVSE shall include smart charging capabilities with Wi-Fi, cellular, or other communications to a central server along with monitoring and load management/curtailment capabilities. EVSE must be compatible with OCPP 1.6 or higher. Company may adjust charging capacity to assess load characteristics and grid impacts of EV charging.

BILLING RATES

L2 charging services will be offered in exchange for an L2 Charging Fee consistent with the Kilowatt-Hour Charge of the Company's first block energy rate of the most current Small General Service (SGS) Schedule, plus \$0.02/kWh. Payment shall be made to Company by Smart Phone App, Radio-frequency identification (RFID) Card or by Credit Card swipe, chip, or contactless at the site. The L2 Charging Fee is intended to recover, at a minimum, the cost of electric service plus transaction and network service costs but is notanticipated to recover the full cost of the charging infrastructure deployment within the term of the pilot. The charging station willbe served by a meter set in Company's name and billed under Company use. Site hosts will have the option of creating alternative pricing mechanisms for driver.

PILOT TERM

This Phase 2 pilot program will expire 36 months following its initial effective date. At the end of the 36-month Phase 2 pilot, Company may seek regulatory approval to continue to own and operate the charging stations or to sell the stations, with any proceeds being credited to program costs.

GENERAL

In addition to the usage recording capabilities of the charging station equipment, Company shall have the right to install at its own expense additional metering and load research devices as it deems appropriate to collect the usage characteristics of the electric vehicle charging station equipment.

REGULATORY AUTHORITY

Services rendered under this program are subject to the authority of the North Carolina Utilities Commission and any changes or other modifications lawfully made thereby.

North Carolina Original Leaf No. 2/1	
Effective	
NCUC Docket No. E-7, Sub 1195, Order dated	

ET-8

Duke Energy Progress, LLC (North Carolina Only)

PUBLIC LEVEL 2 CHARGING STATION PROGRAM, PHASE 2, L2V2-1 (NC PILOT)

PURPOSE

The purpose of this pilot program is for the Company to develop and maintain a foundational network of publicly accessible Level 2 ("L2") electric vehicle ("EV") charging stations to support EV adoption and serve the growing charging needs of Customers in the Company's North Carolina service territory.

AVAILABILITY

Company shall install, own and operate a network of up to 240 L2 stations. Participating site hosts shall have the choice of at least two (2) vendors of EV charging hardware and software which shall be prequalified by the Company to meet functional requirements. Operation and maintenance of L2 stations may be performed by a qualified third-party service provider by agreement with Company. Charging stations will be installed at key publicly accessible locations in Company's North Carolina serviceterritory to enable charging in the public sector in underserved areas and build driver confidence in EVs, with site selection specifically targeted to low-to-moderate income and rural communities. Company willgive priority to installations located in U.S. postal codes that do not have existing access to public EV charging. Charging services will be available to all electric vehicle owners without preference to Company's electric service customers.

CHARGING STATION EQUIPMENT

The L2 stations shall include charging equipment with electrical demand requirements of up to 10 kW. Each location shall include a minimum of two and a maximum of eight L2 Electric Vehicle Supply Equipment (EVSE) stations capable of charging compatible plug-in EVs intended for use on public streets and highways. Additionally, EVSE shall include smart charging capabilities with Wi-Fi, cellular, or other communications to a central server along with monitoring and load management/curtailment capabilities. EVSE must be compatible with OCPP 1.6 or higher. Company may adjust charging capacity to assess load characteristics and grid impacts of EV charging.

BILLING RATES

L2 charging services will be offered in exchange for an L2 Charging Fee consistent with the Kilowatt-Hour Charge of the Company's first block energy rate of the most current Small General Service (SGS) Schedule, plus \$0.02/kWh. Payment shall be made to Company by Smart Phone App, Radio-frequency identification (RFID) Card or by Credit Card swipe, chip, or contactless at the site. The L2 Charging Fee is intended to recover, at a minimum, the cost of electric service plus transaction and network service costs but is not anticipated to recover the full cost of the charging infrastructure deployment within the term of the pilot. The charging station will be served by a meter set in Company's name and billed under Company use. Site hosts will have the option of creating alternative pricing mechanisms for driver.

PILOT TERM

This Phase 2 pilot program will expire 36 months following its initial effective date. At the end of the 36-month Phase 2 pilot, Company may seek regulatory approval to continue to own and operate the charging stations or to sell the stations, with any proceeds being credited to program costs.

GENERAL

In addition to the usage recording capabilities of the charging station equipment, Company shall have the right to install at its own expense additional metering and load research devices as it deems appropriate to collect the usage characteristics of the electric vehicle charging station equipment.

PROGRAM L2V2-1 Sheet 1 of 2

REGULATORY AUTHORITY

Services rendered under this program are subject to the authority of the North Carolina Utilities Commission
and any changes or other modifications lawfully made thereby.

Effective for services rendered on and after _______NCUC Docket No. E-2, Sub 1197

PROGRAM L2V2-1 Sheet 2 of 2

MULTI-FAMILY DWELLING CHARGING STATION PROGRAM, PHASE 2 (NC PILOT)

PURPOSE

The purpose of this pilot program is for the Company to deploy and maintain a network of Level 2 (L2) electric vehicle (EV) charging stations in buildings or complexes with four or more housing units (Multi-Family Dwellings or MFD) to support EV adoption and serve the growing charging needs of Customers across the Company's North Carolina service territory.

AVAILABILITY

Company shall install, own and operate a network of up to 240 MFD L2 stations. Participating site hosts shall have the choice of at least two (2) vendors of EV charging hardware and software which shall be prequalified by the Company to meet functional requirements. Operation and maintenance of L2 stations may be performed by qualified third-party service provider(s) by agreement with Company. Charging stations will be installed at MFD locations in the Company's North Carolina service territory to enable residential charging at MFD in underserved areas and build driver confidence in EVs, with site selection specifically targeted to MFD in low-to-moderate income and rural communities. Charging services will be available to all electric vehicle owners without preference to Company's electric service customers.

CHARGING STATION EQUIPMENT

The MFD L2 stations shall include charging equipment with electrical demand requirements of up to 10 kW. Each station shall include a minimum of two and a maximum of twenty Level 2 (208/240V) charging outlets capable of charging compatible plugin electric vehicles intended for use on public streets and highways. Additionally, EVSE shall include smart charging capabilities with Wi-Fi, cellular, or other communications to a central server along with monitoring and load management/curtailment capabilities. EVSE must be compatible with OCPP 1.6 or higher. Company may adjust charging capacity to assess load characteristics and grid impacts of EV charging.

BILLING RATES

MFD L2 charging services will be offered in exchange for an L2 Charging Fee consistent with the Kilowatt-Hour Charge of the Company's first block energy rate of the most current Small General Service (SGS) Schedule, plus \$0.02/kWh. Payment shall be made to Company by Smart Phone App, Radio-frequency identification (RFID) Card or by Credit Card swipe, chip, or contactless at the site. The L2 Charging Fee is intended to recover, at a minimum, the cost of electric service plus transaction and network service costs but is not anticipated to recover the full cost of the charging infrastructure deployment within the term of the pilot. The charging station will be served by a meter set in Company's name and billed under Company use. Site hosts will have the option of creating alternative pricing mechanisms for driver.

PILOT TERM

This Phase 2 pilot program will expire 36 months following its initial effective date. At the end of the 36-month Phase 2 pilot, Company may seek regulatory approval to continue to own and operate the charging stations or to sell the stations, with any proceeds being credited to program costs.

GENERAL

In addition to the usage recording capabilities of the charging station equipment, Company shall have the right to install at its own expense additional metering and load research devices as it deems appropriate to collect the usage characteristics of the electric vehicle charging station equipment.

REGULATORY AUTHORITY

Services rendered under this program are subject to the authority of the North Carolina Utilities Commission and any changes or other modifications lawfully made thereby.

North Carolina Original Leaf No. 273	
Effective	
NCUC Docket No. E-7, Sub 1195, Order dated	

Duke Energy Progress, LLC (North Carolina Only)

MULTI-FAMILY DWELLING CHARGING STATION PROGRAM, PHASE 2, MFV2-1 (NC PILOT)

PURPOSE

The purpose of this pilot program is for the Company to deploy and maintain a network of Level 2 ("L2") electric vehicle ("EV") charging stations in buildings or complexes with four or more housing units ("Multi-Family Dwellings" or "MFD") to support EV adoption and serve the growing charging needs of Customers across the Company's North Carolina service territory.

AVAILABILITY

Company shall install, own and operate a network of up to 240 MFD L2 stations. Participating site hosts shall have the choice of at least two (2) vendors of EV charging hardware and software which shall be prequalified by the Company to meet functional requirements. Operation andmaintenance of L2 stations may be performed by qualified third-party service provider(s) by agreement withCompany. Charging stations will be installed at MFD locations in the Company's North Carolina serviceterritory to enable residential charging at MFD in underserved areas and build driver confidence in EVs, with site selection specifically targeted to MFD in low-to-moderate income and rural communities. Charging services will be available to all electric vehicle owners without preference to Company's electricservice customers.

CHARGING STATION EQUIPMENT

The MFD L2 stations shall include charging equipment with electrical demand requirements of up to 10 kW. Each station shall include a minimum of two and a maximum of twenty Level 2 (208/240V) charging outlets capable of charging compatible plug-in electric vehicles intended for use on public streets and highways. Additionally, EVSE shall include smart charging capabilities with Wi-Fi, cellular, or other communications to a central server along with monitoring and load management/curtailment capabilities. EVSE must be compatible with OCPP 1.6 or higher. Company may adjust charging capacity to assess load characteristics and grid impacts of EV charging.

BILLING RATES

MFD L2 charging services will be offered in exchange for an L2 Charging Fee consistent with the Kilowatt-Hour Charge of the Company's first block energy rate of the most current Small General Service (SGS) Schedule, plus \$0.02/kWh. Payment shall be made to Company by Smart Phone App, Radio-frequency identification (RFID) Card or by Credit Card swipe, chip, or contactless at the site. The L2 Charging Fee is intended to recover, at a minimum, the cost of electric service plus transaction and network service costs but is not anticipated torecover the full cost of the charging infrastructure deployment within the term of the pilot. The charging station will be served by a meter set in Company's name and billed under Company use. Site hosts will have the option of creating alternative pricing mechanisms for driver.

PILOT TERM

This Phase 2 pilot program will expire 36 months following its initial effective date. At the end of the 36-month Phase 2 pilot, Company may seek regulatory approval to continue to own and operate the charging stations or to sell the stations, with any proceeds being credited to program costs.

GENERAL

In addition to the usage recording capabilities of the charging station equipment, Company shall have the right to install at its own expense additional metering and load research devices as it deems appropriate to collect the usage characteristics of the electric vehicle charging station equipment.

PROGRAM MFV2-1 Sheet 1 of 2

REGULATORY AUTHORITY

Services rendered under this program are subject to the authority of the North Carolina Utilities Commissi	on
and any changes or other modifications lawfully made thereby.	

Effective for services rendered on and after _______NCUC Docket No. E-2, Sub 1197

PROGRAM MFV2-1 Sheet 2 of 2

PUBLIC FAST CHARGING PROGRAM, PHASE 2 (NC PILOT)

PURPOSE

The purpose of this Phase 2 pilot program is for the Company to develop and maintain a foundational network of publicly accessible Direct Current Fast Charge (DCFC) electric vehicle (EV) charging stations to support EV adoption and serve the growing charging needs of Customers across the Company's North Carolina service territory.

AVAILABILITY

Company shall install, own and operate a network of up to 90 DCFC stations across approximately 45 individual locations.

Participating site hosts shall have the choice of at least two (2) vendors of EV charging hardware and software which shall be prequalified by the Company to meet functional requirements. Operation and maintenance of DCFC stations may be performed by third-party qualified service provider(s) by agreement with Company. Charging stations will be dispersed at key highway corridor locations throughout Company's North Carolina service territory to enable intra- and inter-state electric vehicle travel and build driver confidence in EVs. Charging services will be available to all electric vehicle owners without preference to Company's electric service customers.

CHARGING STATION EQUIPMENT

The DCFC stations shall include charging equipment with electrical demand requirements of 150 kW or greater. Each location shall include a minimum of two DCFC Electric Vehicle Supply Equipment (EVSE) stations capable of charging compatible plugin EVs intended for use on public streets and highways. Additionally, EVSE shall include revenue-grade metrology with Wi-Fi, cellular, or other communications to a central server along with monitoring and load management/curtailment capabilities. Company may adjust charging capacity to assess load characteristics and grid impacts of electric vehicle charging.

BILLING RATES

DCFC charging services will be offered in exchange for a Fast Charge Fee consistent with the statewide average for DCFC charging offered by those stations which charge a fee to the driver and are publicly accessible 24-hours per day. Fees may be adjusted throughout the Phase 2 pilot as needed but no more than once per quarter. Payment shall be made by Smart Phone App, Radio-frequency identification (RFID) Card or by Credit Card swipe, chip, or contactless at the site. The Fast Charge Fee is intended to recover, at a minimum, the cost of electric service plus transaction and network service costs but is not anticipated to recover the full cost of the charging infrastructure within the term of the Phase 2 pilot. The charging station will be served by a meter set in Company's name and billed under Company use. Site hosts will have the option of creating alternative pricing mechanisms for driver.

PILOT TERM

This Phase 2 pilot program will expire 36 months following its initial effective date. At the end of the 36-month Phase 2 pilot, Company may seek regulatory approval to continue to own and operate the charging stations or to sell the stations, with any proceeds being credited to program costs.

GENERAL

In addition to the usage recording capabilities of the charging station equipment, Company shall have the right to install at its own expense additional metering and load research devices as it deems appropriate to collect the usage characteristics of the electric vehicle charging station equipment.

REGULATORY AUTHORITY

Services rendered under this program are subject to the authority of the North Carolina Utilities Commission and any changes or other modifications lawfully made thereby.

North Carolina Original Leaf No. 272	
Effective	
NCUC Docket No. E-7, Sub 1195, Order dated	

Duke Energy Progress, LLC (North Carolina Only)

PUBLIC FAST CHARGING STATION PROGRAM, PHASE 2, FC2-1 (NC PILOT)

PURPOSE

The purpose of this Phase 2 pilot program is for the Company to develop and maintain a foundational network of publicly accessible Direct Current Fast Charge ("DCFC") electric vehicle ("EV") charging stations to support EV adoption and serve the growing charging needs of Customers across the Company's North Carolina service territory.

AVAILABILITY

Company shall install, own and operate a network of up to 90 DCFC stations across approximately 45 individual locations. Participating site hosts shall have the choice of at least two (2) vendors of EV charging hardware and software which shall be prequalified by the Company to meet functional requirements. Operation and maintenance of DCFC stations may be performed by third-party qualified service provider(s) by agreement with Company. Charging stations will be dispersed at key highway corridor locations throughout Company's North Carolina service territory to enable intra- and inter-state electric vehicle travel and build driver confidence in EVs. Charging services will be available toall electric vehicle owners without preference to Company's electric service customers.

CHARGING STATION EQUIPMENT

The DCFC stations shall include charging equipment with electrical demand requirements of 150 kW or greater. Each location shall include a minimum of two DCFC Electric Vehicle Supply Equipment (EVSE) stations capable of charging compatible plug-in EVs intended for use on public streets and highways. Additionally, EVSE shall include revenue-grade metrology with Wi-Fi, cellular, or other communications to a central server along with monitoring and load management/curtailment capabilities. Company may adjust charging capacity to assess load characteristics and grid impacts of electric vehicle charging.

BILLING RATES

DCFC charging services will be offered in exchange for a Fast Charge Fee consistent with the statewide average for DCFC charging offered by those stations which charge a fee to the driver and are publicly accessible 24-hours per day. Fees may be adjusted throughout the Phase 2 pilot as needed but no more than once per quarter. Payment shall be made by Smart Phone App, Radio-frequency identification (RFID) Card or by Credit Card swipe, chip, or contactless at the site. The Fast Charge Fee is intended to recover, at a minimum, the cost of electric service plus transaction and network service costs but is not anticipated to recover the full cost of the charging infrastructure within the term of the Phase 2 pilot. The charging station will be served by a meterset in Company's name and billed under Company use. Site hosts will have the option of creating alternative pricing mechanisms for driver.

PILOT TERM

This Phase 2 pilot program will expire 36 months following its initial effective date. At the end of the 36-month Phase 2 pilot, Company may seek regulatory approval to continue to own and operate the charging stations or to sell the stations, with any proceeds being credited to program costs.

GENERAL

In addition to the usage recording capabilities of the charging station equipment, Company shall have the right to install at its own expense additional metering and load research devices as it deems appropriate to collect the usage characteristics of the electric vehicle charging station equipment.

REGULATORY AUTHORITY

PROGRAM FC2-1 Sheet 1 of 1

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Services rendered under this program are subject to the authority of the North Carolina Utilities Commission
and any changes or other modifications lawfully made thereby.

Effective for services rendered on and after __________NCUC Docket No. E-2, Sub 1197

PROGRAM FC2-1 Sheet 1 of 1

ELECTRIC VEHICLE SCHOOL BUS CHARGING STATION PROGRAM, PHASE 2 (NC PILOT)

PURPOSE

The purpose of this Phase 2 pilot program is to support procurement of Electric Vehicle School Buses (EVSB) by public school transportation systems to facilitate market adoption, collect utilization and other load characteristics to understand grid and utility impacts, and explore the potential for vehicle-to-grid power flow from EVSB batteries.

AVAILABILITY

This Program is available on a first-come-first-served basis, at Company's sole option, to Customers operating public school transportation systems in Company's North Carolina electric service territory. Participants must utilize one or more EVSB and provide transportation services to a public school system. Incentives are available for no more than 60 buses operated by a single or multiple school systems. Participants must grant Company access to all vehicle charging data throughout the program term and allow implementation of load management capabilities to reduce charging speeds, up to and including full curtailment and vehicle-to-grid (V2G) bi-directional power flow, provided such control activities do not impact the necessary duty cycle of the school bus. Prior to participation under this Program, Customer and Company shall execute an Electric Vehicle School Bus Supply Equipment Site Agreement (Site Agreement) to establish the terms and conditions of EVSB battery installation and ownership. Prior to execution of the Site Agreement, Customer must disclose to Company all sources of third-party funding for EVSB that it has received or for which it has applied. Company reserves the right to adjust the incentives to Customer described in the next section based on expected or received third-party funding. This program is not available to support procurement of EVSB that are already the subject of a contract executed pursuant to the first phase of this pilot. Customer may simultaneously participate in Schedule EVSE (Pilot).

INCENTIVES

Company shall fund up to \$225,000 per bus for procurement, delivery and installation of EVSB. Customer will own EVSB and shall operate and maintain all EVSB components for the duration of the Phase 2 pilot. Company will retain ownership rights to EVSB battery and shall be allowed to repurpose or remove EVSB battery at the end of its useful life. Customer may simultaneously participate in and receive revenue credits pursuant to the Electric Vehicle Make Ready Infrastructure Program.

BILLING RATE

Usage will be billed under the applicable general service schedule and other riders, if applicable, for the Billing Demand and kilowatt-hours registered or computed by or from Company's metering facilities during the current month.

CONTRACT TERM AND EARLY TERMINATION

The contract period for a Customer shall extend from the commencement date agreed upon by the Customer and the Company until the date that is 36 months after the initial effective date of this Phase 2 pilot. Customer's pilot participation is not transferrable to another party or to a different location without the Company's approval. If Customer terminates the contract within twelve (12) months of the commencement date, Customer shall remit to Company a termination payment in the amount of the incentives received by the Customer from Company multiplied by the percentage of months remaining in this Phase 2 pilot program as of the termination date.

CUSTOMER RESPONSIBILITIES

Customer shall provide a location on premise for installation of Company's facilities and any necessary access to the work site and shall use reasonable diligence to protect Company's equipment from harm. In the event of damage to Company-owned equipment that is caused by the Customer or Customer's agents, Customer agrees to pay all repair or replacement costs associated with the damage. Customer shall grant Company reasonable access rights during times specified by Company to operate and maintain its equipment during the program.

North Carolina Original Leaf No. 270	
Effective	
NCUC Docket No. E-7, Sub 1195, Order dated	
11000 Bocket 110. E 7, Sub 1175, Graci dated	

ELECTRIC VEHICLE SCHOOL BUS CHARGING STATION PROGRAM, PHASE 2 (NC PILOT)

GENERAL

In addition to the usage recording capabilities of the charging station equipment, Company shall have the right to install, at its own expense, additional metering and load research devices as it deems appropriate to collect the usage characteristics of the electric vehicle charging station equipment.

REGULATORY AUTHORITY

Services rendered under this Agreement are subject to the authority of the North Carolina Utilities Commission and any changes or other modifications lawfully made thereby.

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Duke Energy Progress, LLC (North Carolina Only)

ELECTRIC VEHICLE SCHOOL BUS CHARGING STATION PROGRAM, PHASE 2, EVB2-1 (NC PILOT)

PURPOSE

The purpose of this Phase 2 pilot program is to support procurement of Electric Vehicle School Buses ("EVSB") by public school transportation systems to facilitate market adoption, collect utilization and other load characteristics to understand grid and utility impacts, and explore the potential for vehicle-to-grid power flow from EVSB batteries.

AVAILABILITY

This Program is available on a first-come-first-served basis, at Company's sole option, to Customers operating public school transportation systems in Company's North Carolina electric service territory. Participants must utilize one or more EVSB and provide transportation services to a public-school system. Incentives are available for no more than 60 buses operated by a single or multiple school systems. Participants must grant Company access to all vehicle charging data throughout the program term and allow implementation of load management capabilities to reduce charging speeds, up to and including full curtailment and vehicle-to-grid (V2G) bi-directional power flow, provided such control activities do not impact the necessary duty cycle of the school bus. Prior to participation under this Program, Customer and Company shall execute an Electric Vehicle School Bus Supply Equipment Site Agreement ("Site Agreement") to establish the terms and conditions of EVSB battery installation and ownership. Prior to execution of the Site Agreement, Customer must disclose to Company all sources of third-party funding for EVSB that it has received or for which it has applied. Company reserves the right to adjust the incentives to Customer described in the next section based on expected or received third-party funding. This program is not available to support procurement of EVSB that are already the subject of a contract executed pursuant to the first phase of this pilot. Customer may simultaneously participate in Schedule EVSE (Pilot).

INCENTIVES

Company shall fund up to \$225,000 per bus for procurement, delivery and installation of EVSB. Customer will own EVSB and shall operate and maintain all EVSB components for the duration of the Phase 2 pilot. Company will retain ownership rights to EVSB battery and shall be allowed to repurpose or remove EVSB battery at the end of its useful life. Customer may simultaneously participate in and receive revenue credits pursuant to the Electric Vehicle Make Ready Infrastructure Program.

BILLING RATE

Usage will be billed under the applicable general service schedule and other riders, if applicable, for the Billing Demand and kilowatt-hours registered or computed by or from Company's metering facilities during the current month.

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CUSTOMER RESPONSIBILITIES

Customer shall provide a location on premise for installation of Company's facilities and any necessary access to the work site and shall use reasonable diligence to protect Company's equipment from harm. In the event of damage to Company-owned equipment that is caused by the Customer or Customer's agents, Customer agrees to pay all repair or replacement costs associated with the damage. Customer shall grant Company reasonable access rights during times specified by Company to operate and maintain its equipment during the program.

GENERAL

In addition to the usage recording capabilities of the charging station equipment, Company shall have the right to install, at its own expense, additional metering and load research devices as it deems appropriate to collect the usage characteristics of the electric vehicle charging station equipment.

REGULATORY AUTHORITY

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Effective for services rendered on and after	
NCUC Docket No. E-2, Sub 1197	

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