

May 7, 2020

Kimberly A. Campbell, Chief Clerk  
North Carolina Utilities Commission  
430 North Salisbury Street  
Dobbs Building, 5th Floor  
Raleigh, NC 27603-5918

**Re: Docket No. E-2, Sub 1219CS – Duke Energy Progress, LLC’s Application for Adjustment of Rates and Charges Applicable to Electric Service in NC**

Dear Ms. Campbell,

ChargePoint, Inc. (“ChargePoint”) offers the following comments for consideration by the North Carolina Utilities Commission (“Commission”) in the above-captioned Docket.

**I. ABOUT CHARGEPOINT**

ChargePoint is the leading EV charging network in the world, with charging solutions for every charging need and for all of the places that EV drivers go: at home, work, around town, and on the road. With more than 110,000 places to charge in the network, including over 1,100 spots in the service territory of Duke Energy Progress, ChargePoint has thousands of customers – including workplaces, cities, retailers, apartments, hospitals, and fleets. ChargePoint drivers have completed more than 75 million charging sessions, saved upwards of 89 million gallons of fuel, and driven more than 2.1 billion electric miles.

**II. Comments by ChargePoint**

**a. *Scope of Comments***

ChargePoint limits the scope of these comments to hypothetical EV-specific tariffs for both residential and non-residential dedicated EV charging, which we understand may be considered in this proceeding. In particular, ChargePoint is interested in potential consideration for residential sub-metered time of use (“TOU”) rate design.

**b. *Summary of Recommendation***

ChargePoint strongly supports efforts to ensure that the development of North Carolina’s electric vehicle (“EV”) charging market takes place in a manner that benefits the grid and all ratepayers. In order to ensure that the new load from EVs creates net benefits for Duke Energy Progress (“DEP”) customers, it is critical that DEP have access to the full range of EV load management techniques, not just classic sub-metered time of use rates as proposed by Mr. Justin Barnes on behalf of NCSEA.

To the extent that EV-specific TOU rates are considered, ChargePoint respectfully recommends:

1. Evaluation of how rates can be efficiently implemented through alternatives to metering and sub-metering technology and what, if any, regulatory requirements may need to be updated to incorporate such alternatives, (e.g., embedded metering); and
2. Expanding load management options to include non-rate load management techniques.

*c. Background on Embedded Metering*

Utility commissions traditionally require the installation of separate utility meters to implement EV-specific TOU rates. However, jurisdictions around the country are increasingly determining that such requirements inadvertently limit the achievement of load management goals due to the added extra cost of separate utility meters and the limited ability to support active demand response. For example, the Minnesota Public Utilities Commission has required utilities to evaluate “options to reduce the upfront cost burden for customers looking to opt into [EV-specific tariffs] and a discussion of sub-metering technologies available.”<sup>1</sup>

There are a range of methods available on the market that can facilitate the implementation of EV-specific rates without the added cost of secondary utility meters or sub-meters. Smart, or networked, EV charging stations enable load analysis and management, facilitate demand response and load control programs, and directly implement EV-specific TOU rates.

Networked charging stations can feature embedded energy meters, using two-way communications to transmit that data to a central service hosted by the EV networking service company. Many currently-available EV charging solutions have substantially the same metering capabilities as traditional utility meters. For example, ChargePoint’s single-family residential charging station, ChargePoint Home, meets or exceeds the requirements set forth in the electricity-as-motor-fuel sections of NIST Handbooks 44 (device code)<sup>2</sup> and meet the accuracy requirements of ANSI C12.1-2008 (1% class) as applied to embedded EVSE metering.

EV charging data can be accessed and merged with a utility’s meter data management systems to associate the smart charger’s load with utility meters and specific customers for tracking or billing purposes. The same platform and network can provide the necessary load management signals to control chargers.

*d. Menu of Load Management Options*

ChargePoint would also respectfully recommend that a larger menu of load management options be considered in the event that the Commission, Company, and intervening stakeholders consider embedded metering capabilities in the context of EV-specific tariffs. Managed charging programs, in which the utility provides an incentive for smart home

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<sup>1</sup> Minnesota Public Utilities Commission Docket Nos. M-15-111, M-15-112, M-15-120: *Order Accepting 2017 Annual Reports And Establishing Requirements For Next Annual Reports*.

<sup>2</sup> NIST Handbook 44 Section 3.40



chargers, along with a “subscription” or other EV-specific rate that aggregates and manages charging patterns based on real-time conditions can provide an equally, if not more effective, longer-term solution than EV-specific tariffs.

e. *Examples from Other Jurisdictions*

Examples of EV charging load management programs that leverage embedded metering from other jurisdictions include but are not limited to:

- ChargePoint is currently providing the networked charging solution for Green Mountain Power’s managed home charging program including both demand response and using embedded meter data to facilitate an unlimited off-peak charging plan.
- The Minnesota Public Utilities Commission approved pilots by Xcel Energy and Minnesota Power to reduce the upfront cost burden for customers looking to opt into EV tariffs by implementing the tariff directly with networked EV charging stations.<sup>3</sup>

f. *Evaluating Appropriate Load Management Options*

DEP has a separate pilot pending in Docket Nos. E-2, Sub 1197 and E-7, Sub 1195 in which it has proposed to invest \$76 million in a pilot program to support the development of a sustainable, competitive EV charging market in the State.<sup>4</sup> As part of that proposal, DEP recently agreed to convene a series of collaborative meetings to present interim progress and results from the Pilot and to take feedback from other stakeholders on at least an annual basis (the “Electric Transportation Collaborative”).

We believe that the Electric Transportation Collaborative process will allow for appropriate collection of data, Pilot experience, and stakeholder input to inform the design and filing of EV-specific rates by DEP, as well as the full range EV load management options.

III. **CONCLUSION**

ChargePoint appreciates the opportunity to provide these comments and stands ready to provide any additional information at the Commission’s request.

Sincerely,

Matthew Deal  
Public Policy Manager - Regulatory  
ChargePoint

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<sup>3</sup> Minnesota Docket No. 17-817: Petition for Approval of a Residential EV Service Pilot Program.

<sup>4</sup> See Filing of DEP dated February 28, 2020 in Docket Nos. Docket Nos. E-2, Sub 1197 and E-7, Sub 1195.