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December 21, 2018

Vermont Public Utility Commission  
Attn: Judith Whitney, Clerk of the Commission  
112 State Street  
Montpelier, VT 05620-2701

**Re: Case No. 18-2660-INV – Reply Comments on Open Access and Market Competition**

Dear Clerk Whitney,

Attached for electronic filing in the above-referenced matter, please find comments on behalf of ChargePoint, Inc. Please let me know if you have any questions.

Respectfully,

A handwritten signature in black ink, appearing to read "Kevin Miller", written in a cursive style.

Kevin George Miller  
Director, Public Policy  
ChargePoint

## **Case No. 18-2660-INV: Reply Comments on Open Access and Market Competition**

*Reply Comments by ChargePoint – December 20, 2018*

### **1. INTRODUCTION**

ChargePoint is pleased to offer these reply comments to comments filed by Sierra Club and Greenlots on December 14, 2018 and Siemens on December 20, 2018 with the Vermont Public Service Commission (“Commission”) in Case No. 18-2660-INV.

### **2. GENERAL RECOMMENDATION**

ChargePoint recommends that the Commission limit the scope of its interim report to addressing the “appropriate scope of jurisdiction, if any, over EV charging stations and whether legislative changes are necessary to effectuate participants’ recommendations”, as identified by the Commission’s Post-Workshop Memorandum, issued on October 4, 2018.

Consistent with our Post-Workshop Comment filed on October 15, 2018, ChargePoint respectfully urges the Commission to issue an order determining that the sale of electricity for purposes of EV charging is not a prohibited resale of electricity and that third-party owners and operators of EV charging stations fall outside of the Commission’s jurisdiction.

We also recommend that the Commission defer issuing determinations on the remaining issues in this docket until additional, issue-specific workshops are convened. Should the Commission prefer to address additional issues as recommended by parties in comments filed on December 14 and 20, we include the following reply comments.

### **3. OPEN ACCESS**

ChargePoint is in strong support of Open Access requirements for publicly available EV charging infrastructure and concurs with recommendations made by the Sierra Club. Connecticut adopted similar Open Access requirements by statute in 2016.<sup>1</sup> It should be noted that Open Access requirements adopted in California, Massachusetts, Connecticut, and New Hampshire all require publicly available EV charging stations to provide multiple payment options. These requirements intentionally avoid imposing requirements to utilize any one specific method of processing payment option, which is crucial to future-proof investments in EV charging technology.

### **4. PUBLIC INTEREST TEST PROPOSED BY SIERRA CLUB**

ChargePoint disagrees with Sierra Club’s recommendation that Vermont prematurely adopt the State of Washington’s public interest test for utility EV filings without opening a formal rulemaking to specifically address this topic. We urge the Commission against issuing recommendations regarding a public interest test to evaluate regulated utility EV charging proposals until Vermont-specific needs and greater stakeholder input can be taken into consideration through a formal rulemaking process.

As we noted in our Post-Workshop Comment on November 5, 2018, commissions around the country have approved a variety of programs that accommodate increased EV adoption and charging in a grid efficient manner while complementing the current competitive market and supporting customer

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<sup>1</sup> Connecticut [Public Act No. 16-135](#)

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choice in equipment and network services. ChargePoint recommends that the Commission consider such practical examples of how utility commissions have reviewed utility transportation electrification proposals.

A recent example is Duquesne Light Company's (DLC) EV ChargeUp Pilot program, which was approved by the Pennsylvania Public Utility Commission (PA PUC) on December 20, 2018.<sup>2</sup> The PA PUC's review of this program was facilitated by the explicit guiding principles around which DLC's program was designed. For example, DLC identified that it would "engage with the competitive charging industry, foster competition, innovation and equipment and network choice without picking winners and losers" and "promote customer-site host equipment choice and charging control and enable customer-site hosts to choose how or if to bill EV drivers for charging services."<sup>3</sup>

ChargePoint also urges the Commission to consider how jurisdictions around the country, not just in Washington, are evaluating EV charging programs proposed by utilities. As we noted in our comments on November 5, 2017, criteria used in other jurisdictions often evaluate issues that are specific to the EV and EV charging markets, in addition to traditional cost-recovery considerations, e.g.:

- *California PUC Code 740.12 (a)(2)(b) as amended by SB 350 of 2015 (Sec. 32): "Programs proposed by electrical corporations shall seek to minimize overall costs and maximize overall benefits";*
- *Utah SB 115 of 2016: "54-20-103. Electric vehicle incentive program. (1) The commission shall, before July 1, 2017, authorize a large-scale electric utility to establish a program that promotes customer choice in electric vehicle charging equipment and service...";*
- *California PUC Code 740.12 (a)(1)(F) as amended by SB 350 of 2015 (Sec. 32): "The commission shall approve, or modify and approve, programs and investments in transportation electrification, including those that deploy charging infrastructure, via a reasonable cost recovery mechanism, if they are consistent with this section, do not unfairly compete with nonutility enterprises as required under Section 740.3, include performance accountability measures, and are in the interests of ratepayers as defined in Section 740.8."*
- *In Massachusetts, the Department of Public Utilities established a clear set of criteria for evaluating whether utility EVSE investments are eligible for cost recovery without any direction by the Massachusetts General Court (state legislature). See D.P.U. Docket No. 13-182-A, Final Order.<sup>4</sup>*

Should the Commission prefer to issue recommendations on this subject in an interim report, ChargePoint recommends that the Commission include the following evaluative criteria to determine the extent to which a proposed program:

- Maintains customer choice in equipment and network services, encourages innovation, and stimulates competition;
- Requires "skin in the game", or matching payments, from site hosts whenever possible;
- Supports local site host access and control over driver pricing for charging services;
- Avoids island networks and ensures open access for EV drivers;

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<sup>2</sup> [PA PUC Press Release – December 20, 2018](#).

<sup>3</sup> [PA PUC Docket No. R-2018-3000124, Statement No. 6](#).

<sup>4</sup> ChargePoint, Post-Workshop Comments at 15, *Investigation into promoting the ownership and use of electric vehicles in the State of Vermont*, Vermont Public Utilities Commission Case No. 18-2660-INV (Nov. 5, 2018).

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- Supports equitable access to electric transportation options; and
- Encourages smart charging behavior to enable widespread grid benefits.

### **5. OPEN STANDARDS AND PROTOCOLS**

#### *a. Background on Open Standards and Protocols*

ChargePoint agrees with Greenlots and Siemens that requirements for open communications standards will help regulators ensure that drivers, riders, and site hosts will be able to access and operate EV supply equipment (EVSE) and minimize risk of assets becoming stranded. However, we encourage the Commission to avoid imposing overly-prescriptive requirements that will negatively impact fair market competition, restrict customer choice in EV charging equipment and network services, and minimize potential benefits for all ratepayers.

The Open Charge Point Protocol (OCPP) is a network communications protocol for EVSE that was developed in Europe to support station to cloud communications. Another example of a communications protocol is OpenADR, which allows utilities and system operators to send automated demand response signals to customers participating in a demand response program, potentially including EVSE site-hosts. OCPP is not related to OpenADR, and OCPP functionality is not required for charging stations to participate in demand response programs.

EV charging network service providers use communications protocols to carry out different types of network services. It is essential that site hosts have the ability to select the most appropriate hardware and software solutions to meet their specific needs, which will be met in different ways by different network service providers. ChargePoint's hardware and network, which provide a range of industry-leading features, support OCPP. While some site hosts might be well served with simple "on/off" commands, others may need to have the ability set different pricing schedules for employees and visitors or to leverage advanced load-shedding functionality. This differentiation should be considered a strength of the EV charging market.

Site host choice in both hardware and network services are equally essential to spur innovation in charging solutions, drive down costs, and meet unique site host and driver needs. It is important to keep the driver and site host experience as a primary focus, which can best be accomplished by ensuring that market participants are not limited to a one-size-fits-all solution.

ChargePoint notes that it would not be in the public interest to mandate a given communications protocol before it is adopted by an internationally-accredited standards organization. Mandating standards or protocols in advance of acceptance by internationally-accredited standards organizations could expose ratepayers to the very risks such requirements seek to mitigate.

#### *b. Guideline Recommendations*

Should the Commission elect to adopt guidelines or requirements in this interim period, ChargePoint suggest the following amendments to language proposed by Greenlots and Siemens to ensure that requirements imposed on regulated entities are (i) robust, (ii) flexible, and (iii) in accordance with the practices of internationally-accredited standards organizations.

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1. When utilizing ratepayer ~~or taxpayer~~ funding to deploy or incentivize the deployment of electric vehicle charging infrastructure, regulated entities shall require the use of open standards deploy chargers that support leading open protocols to ensure interoperability ~~and future flexibility between charger hardware and software management systems. Open standards should exist between the charger and the cloud.~~
2. When utilizing ratepayer ~~or taxpayer~~ funding to deploy or incentivize the deployment of electric vehicle charging infrastructure, regulated entities shall ensure that deployed infrastructure is capable of the communication of demand response signals and related information with utility systems via ~~a relevant leading open communication an internationally-accepted open~~ standard, such as Open ADR.
- ~~3. When utilizing ratepayer or taxpayer funding to deploy or incentivize electric vehicle charging infrastructure, regulated entities shall seek to maximize access to publicly available chargers by minimizing barriers such as requiring membership or non-point of sale payment functionality. Open payment standards should include credit cards as a minimum.~~
- ~~4. For 1 and 2 above, these standards may include OCPP and OpenADR.~~
- ~~5. An Open Standard is one that has been developed in a transparent manner with industry participation via a process open to any interested stakeholder and is free of charge to use.~~

To provide additional context for our recommendations, ChargePoint recommends focusing any guidelines on ratepayer, rather than taxpayer, funding, given the Commission's jurisdiction. Finally, ChargePoint recommends ensuring that Open Access requirements apply to all publicly-available EV chargers statewide, rather than solely to ratepayer-supported EVSE.

## 6. CONCLUSION

ChargePoint thanks the Commission for the opportunity to provide these reply comments, and we look forward to continue supporting the Commission to investigate issues in this proceeding.