

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF UTAH

DOCKET NO. 19-035-T16

Rocky Mountain Power's Proposed Tariff Revisions to Schedule 120, Plug-in Electric Vehicle Incentive Pilot Program.

**REPLY COMMENTS
OF CHARGEPOINT, INC.**

ChargePoint, Inc. ("ChargePoint"), respectfully files these reply comments in the above-named proceeding pursuant to the Commission's Second Notice of Filing and Comment Period and Order Suspending Tariff, issued November 26, 2019. Below, ChargePoint responds to each of the parties that filed initial comments: Southwest Energy Efficiency Project (SWEEP) and Utah Clean Energy (UCE), the Division of Public Utilities (the Division), the Office of Consumer Services (the Office), and Siemens.

Background

In ChargePoint's initial comments, we recommended that the Commission:

- Maintain the existing per-charger maximum incentive levels of \$2,500 and \$3,500 for non-residential single port and dual port chargers, respectively.
- Specify that RMP's proposed incentive cap for non-residential L2 chargers is inclusive of both charger and installation costs.
- Codify RMP's current requirement that all incentives for L2 chargers (residential and non-residential) be UL Listed and add requirements that the chargers be ENERGY STAR certified and smart to drive best practices.

- Increase the incentive amount for residential L2 charger to \$600 per charger to foster optimal adoption.

ChargePoint continues to recommend that the Commission adopt the above recommendations. Of particular note, each of the parties that filed initial comments either supports or does not oppose Rocky Mountain Power's (RMP or the Company) proposal to maintain a 75 percent cap on the incentives that a customer may receive for a particular project. However, none of the other parties addressed the fact that the Company has proposed not to account for installation costs when calculating the 75 percent cap for non-residential L2 chargers. As ChargePoint discussed in our initial comments, there is no reason not to account for installation costs for L2 chargers because doing so would severely limit the impact of RMP's incentives for this charger technology.

ChargePoint hopes that RMP addresses this issue in reply comments and clarifies that it will account for both charger costs and installation costs for both L2 and DCFC installations. If not, ChargePoint suggests that an additional round of comments or other procedural steps, such as a workshop, may be necessary to reconcile this issue.

Response to Division of Public Utilities

In its initial comments, the Division concludes that the Company's proposed changes to the EV Program and to Schedule No. 120 are "an improvement to the incentive program but not ideal" because "incentive programs should generally not relieve the customer of most or all of the cost of the product" ¹ ChargePoint does not disagree with this general principle; however, as discussed above, there is no reason that incentives should not be used to cover installation costs,

¹ Division of Public Utilities Initial Comments, p. 4.

which can be a substantial portion of the total cost of an L2 installation project for non-residential customers.

ChargePoint believes that capping total incentives at 75 percent of a project's total cost – including both charger and installation costs – will spur charger installations and EV adoption without over-incentivizing customers. ChargePoint also believes that this incentive level is likely necessary at the current stage of market development. According to RMP's website, as of October 1, 2019, there was \$400,000 of incentive funds remaining for non-residential and multi-family L2 projects and \$400,000 of incentive funds remaining for non-residential and multi-family DCFC projects.² If current incentive levels were over-incentivizing customers, it would be expected that funds would have run out much sooner in the year. Instead, it seems that the current incentive levels are necessary to effectively encourage charger installations.

Response to Office of Consumer Services

Similar to the discussion above, ChargePoint does not disagree with the principle stated in the Office's initial comments that "customers should have a financial stake in incentive programs."³

The Office also addresses RMP's proposed residential program. The Office supports the proposed program but states that it is concerned that residential L2 chargers could contribute to increasing peak load.⁴ The Office therefore recommends that the Company be required to provide information with incentive payments encouraging customers to participate in the Company's time-

² <https://www.rockymountainpower.net/savings-energy-choices/electric-vehicles/utah-incentives.html>

³ Office of Consumer Services' Initial Comments, pp. 2-3.

⁴ *Id.* at 4

of-use (TOU) rates.⁵ ChargePoint supports the Office’s recommendation. However, it will be more difficult for residential customers to take advantage of off-peak TOU rates for charging unless the charger they install is a smart charger capable of connecting to a network and managing the charging of the electric vehicle. That was precisely why ChargePoint recommended in our initial comments that only smart L2 chargers be eligible for incentive funds (for both residential and non-residential programs).

To both encourage customers to participate in the Company’s TOU rates and to ensure that customers can participate in any future utility programs that improve grid and generation efficiency through managed charging, ChargePoint recommends that all L2 chargers incentivized by RMP be smart. ChargePoint further recommends that all L2 chargers be UL listed (as is RMP’s current policy) and ENERGY STAR certified.

Response to SWEEP and UCE

SWEEP and UCE make the following recommendations in their initial comments:

- Approve the proposed Residential Charger incentive program;
- Direct RMP to create a permanent EV-TOU rate structure by 2021, based on the findings from the pilot;
- Explore “smart charging” pilot opportunities with EVSE companies and EV manufacturers to best manage EV charging and maximize grid benefits;
- Cap the RMP incentive so that the “Total Customer Incentive” (including incentives from both the Utah Department of Environmental Quality (DEQ) and RMP) does not exceed 75% of the total project cost;

⁵ *Id.*

- Maintain the existing program incentive levels for the Non-Residential and Multi-Family Incentive;
- Direct RMP to develop new EV program elements that expand electric transportation access for disadvantaged and low-income customer segments;
- Encourage RMP to increase the scale of investment in transportation electrification beyond the pilot phase to maximize the economic and environmental benefits for all ratepayers.⁶

ChargePoint agrees with and supports each of SWEEP's and UCE's recommendations, with the caveat that the 75 percent incentive cap for L2 charging stations account for both charger and installation costs, as discussed above.

In particular and as discussed in our initial comments, ChargePoint supports SWEEP's and UCE's recommendation that the current incentive amounts should not be reduced for non-residential and multi-family chargers. As SWEEP and UCE point out, it should not be assumed that all customers will apply for and receive grant funding from the Department of Environmental Quality (DEQ). The availability of DEQ funds is therefore not a reason to reduce the existing incentive levels. The 75 percent project cap will guard against any potential over-incentivizing without reducing the incentives available to customers that do not receive DEQ funds. As SWEEP and UCE also point out, multi-family customers are not eligible for DEQ incentives, so it is particularly important to maintain existing incentive levels for these customers.

Response to Siemens

Siemens makes broad statements of support for incentives from both RMP and DEQ, without addressing any incentive levels or programmatic details proposed by RMP. Instead,

⁶ SWEEP and UCE Initial Comments, pp. 1-2.

Siemens raises what it calls “three technical topics for consideration.”⁷ Specifically, Siemens recommends the Commission consider issues related to charger interoperability and open payment standards, recommendations that ChargePoint does not support in this docket. Siemens also recommends the Commission require chargers to be “smart,” a recommendation ChargePoint has supported through its initial comments and these reply comments.

Siemens suggests that ratepayer funded chargers would benefit from compliance with open technical standards and suggest that chargers that receive incentive rebates “comply” with these standards.⁸ Specifically, Siemens lists, without any discussion of the technical merits, or lack thereof, Open Charge Point Protocol (“OCPP”) and OpenADR as relevant standards.⁹ For the following reasons, ChargePoint believes this recommendation to be unnecessary, and incapable of being implemented.

OpenADR is a standard that is widely accepted in the utility industry and has been used for demand side management programs for many years. ChargePoint supports OpenADR and our charging equipment uses OpenADR in several utility programs. However, it is important to recognize that OpenADR does not “live” on charging equipment. Rather, it is implemented through internet communication between the charging station, the charging station network, and the utility. Therefore, a requirement that charging equipment “comply” with OpenADR is incapable of being implemented unless other programmatic details, such as implementation aspects of the charging station network and how demand response events would be implemented through OpenADR, are also in place. If RMP were to develop a program utilizing OpenADR

⁷ Siemens Initial Comments, p. 2.

⁸ *Id.*

⁹ *Id.* at 3

technology, this level of specificity should be considered in the context of that specific program proposal and evaluated against the goals of the program to ensure the technology is being used to provide the intended grid benefits.

In stark contrast to Open ADR, OCPP is not an international standard and is not recognized as a standard by any national or international standards body such as ANSI or ISO/IEC. Additionally, there is currently no certification process in place to guarantee any level of interoperability between a charging station and a network management system. Without a standardized method to certify that a particular implementation of OCPP in a charging station will work with any other implementation (including network management systems, payment systems, and energy management) it is not possible to guarantee functionality or interoperability.¹⁰

While there is no certification process, charging manufacturers are able to operate on various versions of OCPP and building out extensions to support their unique charging offerings. While companies, including ChargePoint, do have stations using OCPP and are able to demonstrate that hardware is capable of using OCPP software, there is no bright line test to determine OCPP compliance or certification. Similar to our comments on Open ADR, ChargePoint does not believe that Siemens' recommendation that publicly funded charging stations "comply" with OCPP is practical or appropriate at this stage in this program.

Finally, Siemens suggests, without providing any evidence, that "EV drivers can and do find themselves without a way to pay for their public charging sessions."¹¹ To remedy this

¹⁰ Certification of international software standards is typically accomplished with a very complex test suite ensuring that a software implementation works in a very precise, predefined manner. These test suites are developed as part of true standardization processes and are typically run as a service by an independent third party who, if the product passes the test suite, would certify the product as compliant with the standard.

¹¹ *Id.* at 4

hypothetical and unsubstantiated problem, Siemens requests the Commission require charging stations “installed or operated using ratepayer funding have payment options for the EV driver, including a minimum of credit card chip readers.”¹² ChargePoint believes this recommendation should be rejected. Site hosts installing public charging equipment have many options when it comes to payment technologies and should be allowed to choose the option that works best for their particular situation. These options include, but are not limited to charging network RFID cards, app based payment methods, contactless credit card readers, and telephone initiated charging sessions. Mandating a single payment technology is an unnecessary requirement to place on site host, who are best positioned to serve the EV drivers that use their charging stations. Site hosts and charging station manufacturers must consider and carefully weigh many factors when providing payment options including:

- Environmental factors: Chip and magnetic strip readers are known to have reliability issues due to weatherization. Given that charging stations are often left unmonitored, these reliability issues can be magnified. In Utah it will be important to consider environmental factors such as precipitation and freezing temperatures and the impacts those elements can have on charging stations, including the payment methods.
- Security: Chip and magnetic stripe readers run the risk of exposing customers to credit card fraud, as malicious skimming and shimming devices can capture sensitive data on those cards without customers’ knowledge.¹³ This has long been a problem at gas stations and ATM where criminals use inconspicuous devices to steal data when cards are inserted or swiped.

¹² *Id.*

¹³ <https://www.digitalcitizensalliance.org/news/press-releases-2019/security-study-ev-drivers-likely-to-become-targets-for-cyber-criminals-if-credit-card-reader-mandates-are-approved/>

- Future proofing: North America and Europe are increasingly using contactless credit card readers. Visa has stated that 95% of new point of sale terminal being shipped are contactless capable. We believe that it is important to build programs and charging stations that account for where the consumer market is going.

With these considerations in mind, many site hosts and manufacturers have chosen contactless credit card readers as a preferred payment method. Contactless credit card readers are internal to the station and therefore are not contaminated by environmental or human factors, cannot be tampered with, and offer a more secure payment solution for customers than external chip and magnetic strip readers, and are being widely implemented by credit card companies.

Ultimately, it is critical that site hosts have the ability to select the most appropriate hardware and software solutions to meet their specific needs. The Commission should resist making any specific technology requirements on charging stations without both evidence and a robust discussion of the merits of these technologies. ChargePoint believes the record in this docket supports requirements such as UL listed, ENERGY STAR certified, and smart. However, there is no record to support any other requirements at this time.

Summary of Recommendations

For the reasons discussed herein and in ChargePoint's initial comments, ChargePoint respectfully recommends that the Commission in its final order:

- Maintain the existing per-charger maximum incentive levels of \$2,500 and \$3,500 for non-residential single port and dual port chargers, respectively.
- Specify that RMP's proposed incentive cap for non-residential L2 chargers is inclusive of both charger and installation costs.

- Codify RMP’s current requirement that all incentives for L2 chargers (residential and non-residential) be UL listed, ENERGY STAR certified, and smart to drive best practices.
- Increase the incentive amount for residential L2 charger to \$600 per charger to foster optimal adoption.

ChargePoint thanks the Commission for the opportunity to submit reply comments and looks forward to continued engagement in this proceeding.

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CERTIFICATE OF SERVICE

I hereby certify that I have on December 24, 2019, I have duly served a true and correct copy of the foregoing **REPLY COMMENTS OF CHARGEPOINT, INC.** upon all parties via email.

/s/ Scott F. Dunbar _____
Scott F. Dunbar