chargepoint.com

ChargePoint, Inc.
254 East Hacienda Avenue | Campbell, CA 95008 USA
+1.408.841.4500 or US toll-free +1.877.370.3802

August 26, 2021

Will Seuffert, Executive Secretary
Minnesota Public Utilities Commission
121 Seventh Place East, Suite 350
St. Paul, Minnesota 55101-214

Re: Docket No. E-002/M-20-745 – *In the Matter of Northern States Power Company dba Xcel Energy - Electric Petition for approval of Electric Vehicle Programs as part of COVID – 19 Pandemic Economic Recovery Investments.*

Dear Secretary Seuffert,

Attached for electronic filing in the above-referenced matter, please find comments on behalf of ChargePoint, Inc. in response to Xcel Energy's Petition for Electric Vehicle Programs as part of the COVID-19 Relief and Recovery Proposal filed on September 25, 2020.

Please let me know if you have any questions.

Respectfully,

Matthew Deal
Manager, Utility Policy
ChargePoint, Inc.

I. Introduction

ChargePoint, Inc. (ChargePoint) respectfully submits these comments to the Minnesota Public Utilities Commission (Commission) regarding proposed electric vehicle (EV) programs included in Xcel Energy's (Xcel or the Company) COVID-19 Relief and Recovery Proposal.

ChargePoint generally supports the Company's proposed EV programs. As a participant in developing utility EV programs in many jurisdictions, ChargePoint supports the goals and objectives of the proposed programs and respectfully offers several recommendations intended to strengthen the programs, encourage greater participation and ensure a healthy and competitive market for EV charging services.

In summary, our comments are as follows:

- ChargePoint recommends that the Commission modify Xcel's proposal to build, own, and operate public fast charging stations to allow site hosts to choose between at least two vendors for EV charging equipment and network service providers.
- ChargePoint recommends that the Commission direct Xcel to eliminate the requirement in its Public Fast Charging Proposal for each DCFC charging station have a capacity of 150 kW, and instead establish a 50 kW minimum power level for each DCFC station and include the concept of "future-proofing" to allow site hosts to size deployments in accordance with current and prospective need depending on use case.
- ChargePoint supports Xcel's proposal to accelerate plans to electrify a portion of its own fleet.
- ChargePoint recommends that the Commission reject Xcel's proposed DCFC charging rate structure and direct Xcel to allow site hosts to establish the prices and pricing policies for EV charging services provided at utility-owned and operated EV chargers installed on their property. If the Commission decides to restrict the ability of site hosts to establish pricing for EV charging services, ChargePoint recommends that the Commission direct Xcel to develop at least one non-time-varying rate option to provide site hosts an alternative to Xcel's proposed time-varying rate.

II. About ChargePoint

ChargePoint is a world leading electric vehicle 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. make

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 also UL-listed and CE (EU) certified, while 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.

III. Summary of Xcel Energy's Proposals

Xcel filed its Response and Petition regarding COVID-19 Relief and Recovery on September 25, 2020 in Docket No. E002/M-20-745. The filing included proposals for EV programs including an Electric Vehicle Purchase Rebate program, a Public Fast Charging Station program, and a proposal to accelerate the electrification of Xcel's fleet.[1]

Xcel's proposed Electric Vehicle Rebate program would aim to stimulate growth of EV adoption in Minnesota by providing $150 million in incentives to customers to purchase light-duty EVs, electric transit buses, and electric school buses.[2] Xcel proposes two separate rebates for light duty vehicles, one for new vehicles and one for used vehicles, and separate rebates for transit buses, V2G-enabled school buses (cap of 20), and non-V2G school buses. Customers receiving these rebates would be required to take charging service under a time varying rate option or a future managed charging offering.[3]

Xcel also proposes a Public Fast Charging Station program with a budget of $5 million consisting of 21 DCFC stations to be built, owned, and operated by Xcel in locations not currently served by the EV charging market. Xcel states that the purpose of this program is to promote the adoption of EVs by lessening range anxiety of customers, and to help address the public charging infrastructure gap in Xcel's service territory.[4] Customers charging at the DCFC sites included in this program would be subject to a time-varying rate to promote off-peak charging.[5]

[1] See ChargePoint's June 21, 2021, filing in Docket No. E002/M-20-745 for comments on Xcel's proposal to expand its existing EV Fleet Pilot Service.
[2] See Attachment C, p. 2 of Xcel's September 25, 2020, filing in Docket No. E002/M-20-745
[3] See Attachment C, p. 4-5 of Xcel's September 25, 2020, filing in Docket No. E002/M-20-745
[4] See Attachment C, p. 13-15 of Xcel's September 25, 2020, filing in Docket No. E002/M-20-745
[5] See Attachment C, p. 18 of Xcel's September 25, 2020, filing in Docket No. E002/M-20-745

Finally, Xcel proposes to accelerate the electrification of its internal fleet by electrifying a portion of its fleet in two years, rather than the originally planned timeline of ten years. This proposal includes a budget of $2.2 million to purchase 40 light-duty fleet vehicles and the installation of associated charging infrastructure. Xcel states that the objective of the program is to modernize its fleet in order to deliver lower emissions, improve its environmental impact, and take advantage of the lower cost of ownership associated with EVs.[6]

IV. Comments

1. Should the Commission approve, modify, or reject Xcel Energy's proposal to build, own, and operate public fast charging stations?

ChargePoint supports the goals and objectives of Xcel's proposal to "help address the current public charging infrastructure gap in our service territory, provide access to charging for those who cannot charge at home or at their business, and enable intra-community transportation."[7] ChargePoint believes that utilities are vital stakeholders in growing a competitive, sustainable EV charging ecosystem and is not opposed in principle to utilities owning and operating EV chargers for small pilot programs and/or to fill in gaps in charging infrastructure that otherwise would likely not be serviced by the competitive market; as long as parameters are in place to ensure that the utility's participation complements, rather than competes with, the competitive market. If utility participation in the competitive market crowds out other competitive providers, it could have long-term negative impacts on EV drivers and Xcel's customers in the form of fewer choices and higher prices for EV charging services. Utility participation under the right parameters, however, can support the competitive market to encourage EV charger deployment and EV adoption. Accordingly, ChargePoint is not opposed to Xcel's proposal to own and operate up 21 DCFC stations in its service territory, provided the Commission directs Xcel to provide the local site host[8] with a choice of at least two vendors for EV charging equipment and network solutions as well as the ability to establish pricing for EV charging services.

Xcel's proposal should be modified to provide increased site host choice to support the competitive market

ChargePoint recommends that the Commission direct Xcel to provide site hosts the ability to choose the EV charging equipment and network service provider that is deployed on their property from at least two qualified vendors. Protecting a site host's ability to choose their preferred solution – rather than providing a "one-size, fits all" solution – is essential to protect the competitive market for EV charging solutions in Minnesota and the EV drivers that benefit from that competitive market. When customers have the opportunity to select the charging solutions that work best for them, vendors will compete to make high-quality, innovative

[6] See Attachment C, p. 23 of Xcel's September 25, 2020, filing in Docket No. E002/M-20-745
[7] See Attachment C, p. 13 of Xcel's September 25, 2020, filing in Docket No. E002/M-20-745
[8] Site host can be defined as the owner or lessor of the property on which an EV charging station is located. Site hosts may include residential customers; owners of multifamily housing units (MFH); commercial customers that offer charging to the public, their customers, and/or their employees; fleet owners; and government entities.

products that customers want. In doing so, market forces can still be in play, private market actors will be encouraged to invest their own capital, and local site hosts will be able to maximize station utilization and optimize the driver experience. There are examples in other jurisdictions of utilities owning and operating EV charging stations in a manner that maintains site host choice and site host operation such as the Xcel (MN) Residential EV Charging pilot program, San Diego Gas & Electric Power Your Drive Program, Pacific Gas & Electric's EV Charge Network, and Southern California Edison's Charge Ready 2 programs in California.[9] Further, this Commission has previously authorized Xcel Energy to own and operate EV charging stations while providing site host choice.[10]

The site hosts who allow Xcel to install utility-owned EV chargers on their property will have different goals and reasons for doing so, and they should be allowed to choose the equipment and network service provider that they believe will best support their unique goals. Enabling site hosts to choose their preferred EV charging solution ensures that a competitive market can thrive within utility programs and sustainably continue after the conclusion of those programs.

Additionally, enabling customer choice among multiple EV charging network software vendors will increase the effectiveness of Xcel's proposal by preparing the Company to effectively manage and monitor EV charging load from a wide variety of networks, rather than limiting its preparations to a scenario in which it can only manage and monitor EV charging load from one type of network software.

Finally, ChargePoint recommends that the Commission direct Xcel to eliminate the requirement that each participating charging station have a capacity of 150 kW as Xcel proposes.[11] A requirement to install a 150 kW DCFC station is an unnecessary restriction that could result in needlessly over-sizing EV charging station deployments, unnecessarily increase rate-payer costs for both charging equipment and grid upgrades, and fails to fully recognize that actual EV charging needs can vary in terms of ports and power level (i.e., kW level). Instead, ChargePoint recommends that the Commission direct Xcel to instead establish a 50 kW minimum power level for each DCFC station and include the concept of "future-proofing" to allow site hosts to size deployments in accordance with current and prospective need depending on use case.[12]

---

[9] *See Order Approving Pilot with Modifications, and Setting Reporting Requirements. MN PUC Docket 19-186 (June 21, 2019);* Decision Regarding Underlying Vehicle Grid Integration Application and Motion to Adopt Settlement Agreement, CPUC Docket No. A.14-04-014 (January 28, 2016); Decision Directing PG&E to Establish an Electric Vehicle Infrastructure and Education Program, CPUC Docket No. 16-12-065 (Dec. 21, 2016); Decision Authorizing Southern California Edison Company's Charge Ready 2 Infrastructure and Market Education Programs, CPUC Docket No. A.18-06-015 (August 27, 2020).

[10] *See* Order Approving Pilots with Modifications, Authorizing Deferred Accounting, and Setting Reporting Requirements, Docket 18-643 (July 17, 2019). *See also* Order Approving Pilot with Modifications, and Setting Reporting Requirements, Docket 19-186 (October 7, 2019).

[11] See Attachment C, p. 14 of Xcel's September 25, 2020, filing in Docket No. E002/M-20-745

[12] Future proofing refers to the practice of sizing the power feed for charging stations to allow for 1) the addition of more ports at a site as demand for EV charging increases, or 2) higher voltage charging as the market evolves to permit the use of faster charging methods.

Xcel's proposal should be modified to allow site hosts the ability to establish prices and pricing policies for EV charging services

Xcel's proposal would mandate a time-varying rate with the intent of incentivizing beneficial charging by sending price signals to EV drivers. While ChargePoint supports maximizing the grid benefits of EV charging, we disagree that a time-varying rates to EV drivers are appropriate for DCFC charging. Xcel has not provided any evidence demonstrating that demand for DCFC charging is elastic, which is necessary for its proposal to have its desired effect of encouraging off-peak charging. For example, demand for residential charging is relatively elastic because it is typically convenient for customers to respond to price signals by charging during off-peak hours when it is less expensive to do. In the residential context, the residential customer is both the owner of the charger and the EV driver, so they have the ability to plan ahead and to schedule their charging to avoid on-peak hours as much as possible. By contrast, DCFC charging is inelastic because it is very difficult for customers to change their charging behavior or driving patterns in response to changes in prices throughout the day. Public DCFCs provide the valuable service of getting EV drivers back on the road as quickly as possible. Because most day-to-day EV charging occurs at home, drivers typically only use DCFCs when they really need them, such as when they are on a long road-trip or they do not have enough charge to reach their destination. A driver that pulls up to a DCFC during on-peak hours is therefore unlikely to respond to an on-peak price signal by waiting until off-peak hours to charge. In such situations, the price signal will fail to have its desired effect of shifting charging to off-peak hours but will instead penalize the driver (or riders) for something that is outside of their control and result in a negative customer experience – an experience the driver will likely blame on the site host or the EV network service provider. For these reasons, mandating a time-varying rate for public DCFC chargers, especially in areas where there is only one charging option, could reinforce the notion that charging EVs is inconvenient for drivers and instead of spurring EV adoption it could act as a deterrent. Simply put, demand for DCFC charging is not elastic enough for a price signal to have a meaningful effect on charging behavior. It is because of this that site hosts need the flexibility to leverage the managed charging capabilities of the EVSE through their network service provider to be able to balance grid needs while still serving the primary needs of EV drivers.

Accordingly, ChargePoint recommends that the Commission reject Xcel's proposed DCFC charging rate structure and direct Xcel to allow site hosts to be the utility customer-of-record and establish the prices and pricing policies for EV charging services provided at utility-owned EV chargers installed on their property. Site host control over pricing is important to ensure that site hosts can achieve their unique goals for hosting EV charging stations. This arrangement ensures the utility remains whole for any costs related to the electricity used by the charging stations while allowing the site host flexibility to price the charging services in accordance with its own goals and to align with its core business. It will also encourage site hosts to maximize station utilization through signage, parking enforcement, maintenance, and pricing. If the Commission decides to restrict the ability of site hosts to establish pricing for EV charging services, ChargePoint recommends that the Commission direct Xcel to develop at least one non-time-varying rate option to provide site hosts an alternative to Xcel's proposed time-varying rate.

2. Should the Commission approve, modify, or reject Xcel Energy's request to accelerate its own fleet electrification?

ChargePoint supports Xcel's proposal to accelerate its plans to purchase 40 light-duty EVs, and associated charging infrastructure, from a ten-year timeframe to two years; and appreciates Xcel's efforts to electrify its fleet in order to reduce emissions and improve its environmental impact. Additionally, ChargePoint recommends that Xcel utilize the experience its gains from these initial investments to evaluate the further electrification of its fleet.

V. Conclusion

ChargePoint appreciates Xcel's efforts to advance transportation electrification in its service territory. We look forward to working with the Commission, the Company, and the parties to ensure that the development of Minnesota's EV charging market takes place in a manner that benefits the grid and all ratepayers and ensures that the competitive market can provide the benefits of competition to EV drivers.