BEFORE THE STATE OF WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION
COMMENTS OF CHARGEPOINT, INC

Inquiry into Issuing a Policy-Interpretative Statement Describing Commission Policy Related to Utility Investment in Electric Vehicle Supply Equipment pursuant to RCW 80.28.360	))))	DOCKET UE-160799

I. Introduction

ChargePoint, Inc. ("ChargePoint") is the world's largest and most open electric vehicle ("EV") charging network with more than 30,000 Level 2 EV and DC fast charging spots around the country, including 1,180 public and private ports in Washington. ChargePoint has more than 5,500 customers, including major employers, municipalities, universities, utilities, real estate developers and parking garage facility owners and operators that provide EV charging and related services to EV drivers.

ChargePoint applauds the UTC for pursuing a policy workshop to address the questions raised by RCW 80.28.306. ChargePoint was an active participant in the Commission discussion on Docket UE-160082 where we raised concerns about Avista's EVSE pilot program. Many of these concerns were not resolved, including the impact that Avista's pilot will have on fair market competition. ChargePoint hopes that a policy workshop and any resulting rulemaking or policy statement will clarify the requirements for utilities to receive a rate of return on EV charging infrastructure, which in turn will create regulatory certainty for utilities seeking to develop programs and EV charging station companies seeking to compete in Washington.

II. Comments on Commission Questions

1. **RCW 80.28.360 authorizes the Commission to allow an incentive rate of return on investment on capital expenditures for electric vehicle supply equipment under certain circumstances. In addition to being installed after July 1, 2015, the law identifies several criteria for the capital expenditures to qualify for the incentive rate of return. How should an electrical company demonstrate that capital expenditures for EVSE meet each of the**

a. The capital expenditures do not increase costs to ratepayers in excess of one-quarter of one percent.

RCW 80.28.360 authorizes the Commission to allow an incentive rate of return so long as the capital expenditures do not increase costs to ratepayers in excess of one-quarter of one percent. In order to limit cost on ratepayers, utilities will need to size and scope EVSE investments appropriately. There are several ways that utilities could develop programs that reduce costs to ratepayers. ChargePoint recommends the following:

- **Evaluate Market Need:** Utilities should work with charging station vendors and existing market players to determine the size of the market, active participants, and need for investment. Utilities should also be required by the Commission to provide data on current and expected EV adoption to ensure programs are sized appropriately.
- **Leverage Private Investment:** Utilities can reduce cost to ratepayers by requiring the site host, which is the property owners that would host a charging station owned by the utility or receive an incentive to install a charging station on their own property, to contribute "skin in the game" in the form of a payment to the utility or direct purchase of a portion of the investment such as the equipment cost and O&M. The Commission should consider requiring utilities to present an argument for the business model chosen for their program and how that best reduced costs to ratepayers and leveraged funding in the most efficient way possible.
    - There are two models in California to consider:
        1) Southern California Edison's Charge Ready pilot is structured so that the utility has invested in the "make ready" which includes the lines, wires, conduit, and paneling needed to install a charging station, up to but not including the equipment itself.[1] The site host for this charging station then receives a rebate

[1] California Public Utilities Commission, January 25, 2016, Decision Regarding Southern California Edison Company's

covering a portion of the cost for that site host to directly purchase from a charging station vendor the equipment of their choice. In this instance, the site host, rather than ratepayers, is covering the cost of Operations & Maintenance (O&M) which further reduces the overall program cost. In the decision approving SCE's program, the Commission made stated the following Conclusions of Law regarding SCE's program decision.[2]

1. *A rebate provided to customer participants for the purchase and installation of an EV charging station at a level that encourages program participation but also limits unnecessary ratepayer funding is reasonable.*
2. *The site host will take a more active and engaged role in evaluating the available equipment and services offered by vendors, and assessing site and user needs, when it has a rebate that covers only a portion of the costs, resulting in better optimization of charging station usage and infrastructure maintenance.*
3. *Customer participants should make some financial contribution toward purchasing and installing EV charging stations.*

2) San Diego Gas & Electric's Electric Vehicle Grid Integration Pilot Program requires all site hosts to pay a "participation payment" even though the utility is ultimately owning the equipment. [3] The Commission ruled in its decision on SDG&E's case that this participation payment should be used to "offset the O&M costs incurred" by the pilot.[4] In May 2016, SDG&E filed an advice letter defining the participation payment amount, which is currently under review by the CPUC.

[2] CPUC, Decision 16-01-023, pg. 55.
[3] California Public Utilities Commission, February 4, 2016. Decision Regarding Underlying Vehicle Grid Integration Application and Motion to Adopt Settlement Agreement (Decision 16-01-045)

- **Focus on Areas of Greatest Need:** Utilities should focus investments in specific areas of need such as underserved communities or multifamily housing, which is an underpenetrated market for charging stations. This will ensure that ratepayer funding is leveraged where there is greatest need and a lack of existing private funding to serve the same purpose.

In addition to the points above, ChargePoint would recommend that the Commission review the proposed rules developed by the Oregon Public Utilities Commission in AR 599, which is set to be reviewed on August 22.[5] This criteria, while directed by specific legislation that is different from HB 1853 in Washington, provides a thorough study of all points needed for utilities in that state to seek rate recovery on an EV charging station investment.

b. The EVSE investments are pursued on a fully regulated basis similar to other capital investments behind a customer's meter.

RCW 80.28.360 allows utilities to earn an incentive rate of return only if they pursue capital investments in EVSE "on a fully regulated basis similar to other capital investments behind a customer's meter." Utilities can demonstrate that their capital investments in EVSE are being made on a fully regulated basis by making these capital investments with Commission oversight and approval.

Demand-side management (DSM) or conservation programs provide a model for how capital investments in EVSE can be fully regulated. RCW 80.28.303 allows utilities to seek Commission approval for a conservation service tariff. Under the statute, a utility must specify the terms and conditions under which it will offer conservation measures to customers and the maximum expenditures it will make to provide conservation measures under the tariff. In other words, a utility is required to inform the Commission about the types of conservation programs it will offer and how much it plans to spend on these programs, but it is not required to provide a granular level of detail at the time it seeks the Commission's approval for its conservation programs. As the Commission well knows, many utility

conservation programs often rely on rebates and other incentives provided by the utility to customers to reduce the upfront cost of energy efficient equipment.

ChargePoint recommends that the Commission should likewise find that a utility's EVSE capital investments are fully regulated - and therefore eligible for an incentive rate of return - if the utility provides the Commission with a description of the terms and conditions under which it will offer EVSE incentives to customers and specifies a maximum amount of expenditures it will make providing these incentives. A description of the types of EVSE incentives the utility plans to offer, coupled with a spending cap, should provide the market with clarity on the potential program impact and be sufficient to deem a utility's EVSE capital investments fully regulated for the purposes of RCW 80.28.360, and to qualify the utility for an incentive rate of return, if it seeks one. The Commission's oversight will ensure that the utility's capital investments in EVSE are prudent, allow for competition, and that the EVSE is used and useful to the utility's customers.

c. The projects are installed and located where electric vehicles are most likely to be parked for intervals longer than two hours.

This language appears to limit utility investment to Level 2 charging infrastructure. A 50kW Direct Current Fast Charger (DCFC) can provide 200 miles of range in one hour of charge. There are currently no vehicles with a battery size that would require more than one hour of charge. And though there are several models of EVs expected in the next few years at 200 miles of range, including the Chevy Bolt, it is not expected that battery sizes will accommodate more than an hour of charge, and definitely not 2 hours of charge, at a DCFC. Additionally, DCFC technology is expected to advance to 150-350 kW, which will further reduce needed charge times. This higher speed technology was recently referenced in an announcement by the White House.[6] It therefore appears this language does not allow utilities to receive an incentive rate of return on DCFC investments.

[6] The White House Office of Press Secretary, July 21, 2016, FACT SHEET: Obama Administration Announces Federal and

In order for EVSE to be considered eligible for the incentive rate of return, RCW 80.28.360 further requires that EVSE must reasonably be expected, at the time it is placed in the rate base, to result in "real and tangible benefits for rate payers."

2. **What real and tangible benefits to ratepayers should electrical companies be required to quantify and demonstrate in order for the Commission to:**
    a. **make a prudence determination, and**
    b. **authorize an incentive rate of return?**

The Commission should require utilities to demonstrate that investments in EVSE provide maximum benefits and minimum costs to ratepayers. Real and tangible benefits could be achieved by incentivizing equipment that is "future proofed" with demand response capabilities, networking, and load management technology. The utility could also maximize grid benefits of increased EV load through managed charging or by simply encouraging charging at certain times of date using rate signals to the EVSE site host. These efforts could improve overall grid efficiency, integration with renewable energy, and overall downward pressure on rates impacting all ratepayers. The California Transportation Electrification Assessment by E3 discusses the societal and grid benefits of utility investment in EVSE.[7]

Utilities should also be required to stimulate, rather than suppress, competition, customer choice, and innovation. It is not prudent (or possible) for the utility alone to provide EV charging infrastructure for all driver needs. Instead, it would be prudent for the utility to incentivize further adoption and increased load by working with EV charging equipment and service vendors to build a sustainable and vibrant EV charging market.

3. **Should the incentive rate of return authorized in RCW 80.28.360(2) apply to EVSE investments that serve the public at large, or only to investments in infrastructure that serve the company's electric customers?**

In answering this question, it is very important to keep in mind that drivers are not restricted in their charging behavior to the boundaries of a specific utility territory or even those of one state. Drivers should have a seamless charging experience wherever they drive and not be required to sign up as a customer of a different utility whenever they take a road trip or commute across utility territory

boundaries. The Commission should avoid any policy that limits the use of the EVSE to one set of utility customers as this would also be counter to encouraging utilization of the asset. Instead, the "utility customer" in this case is site host, who is ultimately the customer of record with the utility, and who benefits from having EV drivers visit their location to charge, even if the utility ultimately owns that equipment.

4. **While EVSE increases electric load, existing tests used by the Commission to determine the cost-effectiveness of energy efficiency investments may be applied or adapted for EVSE. Is the Total Resource Cost (TRC) an appropriate measure of whether EVSE investments provide benefits to ratepayers?**

5. **What, if any, modifications to traditional cost-effectiveness tests are necessary or appropriate to use for investments in EVSE?**

The Total Resource Cost (TRC) alone may not effectively quantify the ratepayer benefits of EVSE investments. There may be societal benefits associated with reduction in air pollution from cleaner vehicles, balancing load to support increased renewable energy or hydro on the grid, and other indirect or locational benefits. ChargePoint is not an expert on cost-effectiveness tests but would encourage the Commission to ensure that all benefits to ratepayers, even those outside of the traditional cost-effectiveness tests, are included in any evaluation of EVSE investments.

Section 1 of HB 1853, the enabling legislation for this law, outlines benefits of transportation electrification beyond traditional cost effectiveness.[8]

> *(1) The legislature finds that the transportation sector is Washington's largest contributor to greenhouse emissions and hazardous air pollutants as defined by federal national ambient air quality standards and mobile source air toxics rules. The sector's portion is considerably higher than the national average because our state relies heavily on hydropower for electricity generation, unlike other states that rely on fossil fuels such as coal, petroleum, and natural gas to generate electricity.*

(2) The legislature also finds that federal clean air act regulations and complementary Washington policies supporting renewable energy generation, energy efficiency, and energy conservation are likely to result in further reduction of emissions in the electricity and in the combined residential, commercial, and industrial sectors. The legislature finds that state policy can achieve the greatest return on investment in reducing greenhouse gas emissions and improving air quality by expediting the transition to alternative fuel vehicles, including electric vehicles.

(3) The legislature finds that utilities, who are traditionally responsible for understanding and engineering the electrical grid for safety and reliability, must be fully empowered and incentivized to be engaged in electrification of our transportation system. The legislature further finds that it has given utilities other policy directives to promote energy conservation which do not make the benefits of building out electric vehicle infrastructure, as well as any subsequent increase in energy consumption, readily apparent. Therefore the legislature intends to provide a clear policy directive and financial incentive to utilities for electric vehicle infrastructure build-out.

Given that the intent of the law appears to be enabling utility investments based on societal or grid benefits not quantified by traditional cost effectiveness tests, the Commission should take these benefits into account when reviewing utility applications.

Regarding the provision of fair competition as specified in RCW 80.28.360(1):

6. **What policies should the Commission consider to improve access to, and promote fair competition within the market? Please comment separately on how the Commission should address the following:**
    a. **Improve access to EV charging as a regulated public service**

ChargePoint supports a role for utilities in advancing transportation electrification. As stated in answers above, it may be prudent for utilities to consider where "improved access" is actually needed, such as disadvantaged communities or multifamily housing. It is important to

and expected investments prior to making any predetermination on the appropriate size and scope of any utility program. The specific barriers to EV charging infrastructure deployment for that utility territory must also be considered. The needs of the industry in Eastern Washington may be very different from the barriers that exist, if any, for the private sector to sell and install charging stations. The Commission should carefully consider what is being "improved" when reviewing utility applications for EVSE pilots and programs.

b. Ensure that the utility procurement process for charging equipment is fair and competitive

ChargePoint encourages the Commission and utilities to consider the following principles for developing a fair and competitive procurement process:

1. **Customer Choice:** Utilities must enable customer choice in charging equipment and services. The site host must have the ability to choose, from a list of multiple qualified vendors, the technology they want installed on their own site. Customer choice allows multiple vendors qualified into a utility program to compete directly for a customer (the site host) even if the utility ultimately owns the charging equipment. In the SDG&E pilot, this means that charging station vendors are directly talking to potential site hosts, listening to the needs and interests of that site, and competing directly with other vendors to have that site host choose our product from SDG&E's program. Once the site host makes its selection, SDG&E steps in to install the equipment of the site host's choice and then the utility ultimately also provides the O&M in that case.

   The feedback from the site host to the vendor achieved through customer choice is important for competition, which supports more vendors hiring more local sales people and creating a local sustainable charging industry, but also is vital to innovation. That feedback is taken back to charging station manufacturers to respond to needs with software updates, changes

in technology appearance, new features on the equipment, and other elements that may not be improved if the relationship between the site host and charging station vendor is severed by an incomplete utility procurement process.

2. **Rolling Vendor Qualification**: Utilities should set requirements for charging stations and grid management capabilities (including demand response) but allow for future innovation by creating a "rolling" vendor certification program. By allowing new technologies or new charging station vendors to apply for certification mid-program, additional products and features for network and chargers can be brought to market to enable competition and differentiation.
3. **Allow Procurement of Multiple Business Models**: The charging station industry has evolved with multiple business models that respond to specific and unique needs of site hosts in different verticals. It is premature in the market for a utility (or Commission) to force a selection of a winner. This means in practice that utilities should not restrict vendors to bid separately on hardware, software, and O&M. It is not "fair market competition" to allow a utility to select a single software vendor and then force all hardware vendors to bid separately on their ability to use one proprietary software. Software and hardware need to be integrated seamlessly in order to ensure functionality and it may be necessary to bid a combined product. Some hardware and/or software vendors also offer O&M services which should be allowed to bid into a program.

c. Allow a competitive market for charging services to develop

With the right program design, utility investments in EV charging infrastructure can foster growth in the competitive EV charging market. However, with the wrong program design and restrictions on customer choice, utility programs could stall market development and crowd out private investment and competition. Economist Charles Cicchetti of Pacific Economics Group stated, in his testimony in the Pacific Gas and Electric EV Infrastructure and Education Program Application to the

CPUC, the potential impacts of poor program design. In order to allow for a competitive market to develop, Mr. Cicchetti recommends:

> *The balanced mix of incentives that support rather than supplant private investment and policies supportive of competition encourages innovation and lets consumer preferences emerge in the market. Competitive markets are more efficient in sorting out what works and what consumers want than a large utility's planners. The same opportunities for a combination of regulatory encouragement, utility financial support, and competition are available in the EV charging station market.*[9]

ChargePoint strongly believes that customer choice in equipment and services within a utility program creates this appropriate balance and enables a competitive marketplace regardless of whether the utility or the site host ultimately owns the charging equipment.

Regarding the interaction of RCW 80.28.360 with other statutes:

7. **Considering RCW 80.12.020,4 when would it be appropriate for an electrical company to "gift" EVSE to a customer, as provided in RCW 80.28.360(4)? What notice should be given?**

RCW 80.12.020 states (emphasis added):

Order required to sell, merge, etc.—Exemption.
(1) ***No public service company shall sell, lease, assign or otherwise dispose of the whole or any part of its franchises, properties or facilities whatsoever, which are necessary or useful in the performance of its duties to the public****, and no public service company shall, by any means whatsoever, directly or indirectly, merge or consolidate any of its franchises, properties or facilities with any other public service company,* ***without having secured from the commission an order authorizing it to do so****. The commission shall not approve any transaction under this section that would result in a person, directly or indirectly, acquiring a controlling interest in a gas or electrical company without a finding that the transaction would provide a net benefit to the customers of the company.*
(2) This section shall not apply to any sale, lease, assignment or other disposal of such franchises, properties or facilities to a special purpose district as defined in RCW 36.96.010, city, county, or town.

Regarding gifting of assets under RCW 80.28.360(4) given the prohibition on disposing property in RCW 80.12.020, "gifting" of an EVSE to a customer is allowed so long as the EV charger is fully depreciated.

[9] Charles Cicchetti, Pacific Economics Group, November 20, 2015, Prepared Testimony of Charles J. Cicchetti on behalf of

However, if the utility seeks to offer a charging station rebate rather than own equipment itself, RCW 80.12.020 would not apply. A rebate for charging equipment, such as the home charging station rebate currently offered by Puget Sound Energy, would not qualify then as a gift to customer since the utility never owned the equipment in the first place.

8. **Considering RCW 80.28.320, what other factors should the Commission consider in order to approve investor-owned utility proposals to own and operate EVSE as a regulated service?**

RCW 80.28.320 states, in its entirety:

The commission shall not regulate the rates, services, facilities, and practices of an entity that offers battery charging facilities to the public for hire; if: (1) That entity is not otherwise subject to commission jurisdiction as an electrical company; or (2) that entity is otherwise subject to commission jurisdiction as an electrical company, but its battery charging facilities and services are not subsidized by any regulated service. An electrical company may offer battery charging facilities as a regulated service, subject to commission approval.

This law allows third parties to own and operate charging stations and set pricing to drivers for charging services without UTC regulation. ChargePoint strongly believes that pricing to the drivers for the charging service should reflect the diversity of site hosts' needs, priorities and commercial motivations. For example, a workplace customer may want to provide free charging for employees as a benefit, but charge a small per kWh fee to guests. A retailer may seek to provide a free charging session for the amount of time a customer is expected to stay in their store to optimize shopping time and then, after that initial dwell time, charge a fee in order to encourage the customer to move their vehicle once they've finished shopping. Multifamily housing owners may seek to establish attractive pricing for tenants to encourage occupancy but charge a fee for guests.

It is important to allow site hosts the ability to continue to control pricing to the driver for the charging service even if the station itself is subsidized in some way by the utility. The site host, not the utility, is best positioned to manage their own parking lot and many of these pricing configurations include parking policies to maximize utilization. If the site host or another non-utility third party owns

will be a crucial part of any successful EVSE deployment. In fact, the statute's use of the word, "shall," makes it clear that the Commission cannot regulate pricing for charging services offered by non-utilities.

If a utility proposes to own and operate charging stations, then under the statute these stations must not be subsidized by the utility's regulated services if the utility is to offer pricing flexibility. In other words, as long as revenue from the charging services that the utility offers is sufficient to cover the cost of the charging stations, the charging services are not subject to UCT regulation. The Commission should allow utilities to demonstrate that such cross-subsidization will not occur through reasonable forecasts of expected revenue from charging services. Utilities should also be able to avoid cross-subsidization because they will be able to adjust the prices they charge for charging services.

ChargePoint recognizes that, in the context of public utility regulation, it is counterintuitive to think about electricity being sold at unregulated rates. However, EV charging services are about more than just the delivery of electricity – they are value-add services that site hosts need to be able to tailor to their customers' needs. As a result, standard principles of rate regulation may not apply in the same way they do to essential standard electric service that utilities provide to homes and businesses.

Importantly, the statute is focused on the entity that offers the charging facilities at issue, and not on the entity that actually owns the facilities. If a utility desires to own charging stations, RCW 80.28.320 would not pose an obstacle to pricing flexibility if the site host is the entity who manages the stations and offers charging services to drivers according to the site host's own needs and preferences. Such an arrangement could be accomplished through a lease agreement for the charging station, or the utility could sell electricity to the site host at a regulated rate, and the site host would determine how much to charge drivers for charging services, if it chooses to charge them at all.

If a utility proposes to own and operate EVSE as a regulated service, although allowed under the statute, the Commission should first consider whether such a service is in the public interest, given that

successful EVSE deployments. If the Commission does approve a regulated utility-owned charging service, the Commission should further consider what type of regulation is necessary. As mentioned, ordinary rate regulation may not apply straightforwardly to regulation of EV charging services. For example, rather than setting a flat per kWh rate, the Commission may find it sufficient to set a pricing maximum so that the utility could allow site-hosts some flexibility based on their customers' needs.

Further, if the Commission approves a utility-owned charging service, the Commission should require the utility to offer customer choice and ensure interoperability. Even if the utility owns and operates the charging stations, it can and should allow site hosts to choose what type of charger is located on their property and what capabilities will be available to their customers. The Commission should also ensure that a regulated utility charging service only deploys charging stations that offer interoperability and rely on national standards.

Overall, if utilities propose to operate EVSE as a regulated service, ChargePoint encourages the Commission to consider any and all factors that indicate whether the proposal would allow for flexibility and choice for site hosts and drivers. ChargePoint further encourages the Commission to adapt the ordinary principles of utility regulation in a flexible manner to account for the myriad needs of site hosts and drivers.

III. Conclusion

ChargePoint appreciates the opportunity to provide these comments. We look forward to participating in the policy workshop on September 13.

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Respectfully submitted,

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