

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Consider  
Alternative-Fueled Vehicle Programs,  
Tariffs and Policies.

Rulemaking 13-11-007  
(Filed November 14, 2013)

**COMMENTS OF CHARGEPOINT, INC.  
ON ORDER INSTITUTING RULEMAKING TO CONSIDER  
ALTERNATIVE-FUELED VEHICLE PROGRAMS, TARIFFS, AND POLICIES**

In accordance with Rule 6.2 of the California Public Utilities Commission (“Commission”) Rules of Practice and Procedure, ChargePoint, Inc. (“ChargePoint”) submits the following comments on the Order Instituting Rulemaking to Consider Alternative-Fueled Vehicle Programs, Tariffs, and Policies (“OIR”). ChargePoint recognizes that this rulemaking will address both electric vehicles (“EVs”) and other types of alternative-fueled vehicles. The comments below address rulemaking issues as they relate to EVs and EV charging infrastructure.

**I. Introduction**

ChargePoint welcomes the opportunity to participate in this OIR proceeding. The markets for electric vehicles and electric vehicle service equipment (“EVSE”) are strong and evolving successfully in California, thanks in no small part to this Commission’s previous decisions addressing key jurisdictional and policy issues. However there is much to be done in order to continue facilitating and encouraging the use of electric vehicles throughout the state. In other words, this is a good time for a “midterm market assessment” of how the EV and EV infrastructure and service markets are unfolding, and how the Commission’s actions going forward can create new momentum and successful scaling of the markets for EVs and essential EV-related infrastructure and services.

The scope of this proceeding appropriately includes “all issues related to alternative-fueled vehicles adoption” and focuses on several important areas, including development of policies, guidelines and strategies to facilitate vehicle-grid integration (“VGI”), review and development of Alternative-fuel Vehicle (“AFV”) tariffs and rates, consideration of unique or innovative financing strategies for AFV costs, and continuing work on submetering protocols to facilitate the use of customer-owned meters for utility billing of AFV electric load.

These areas of focus are exactly right, since widespread scaled adoption of EVs in California depends on development of opportunities for vehicle to grid integration, including EV drivers’ participation in demand response (“DR”) and ancillary services markets, rate structures that will move EV adoption, and innovative financing options supporting investment in EV infrastructure and vehicles. In these comments, ChargePoint will provide background and an overview of key principles for consideration in this OIR. We will provide an update on the EV infrastructure market in California at the midmarket point and respond to some market issues raised in the December 4 workshop, while saving detailed comments on the workshop and White Paper until after the workshop report is circulated. Finally, we will outline the importance of financing and bringing private investment effectively into the market, discuss a potential role of the investor-owned utilities (“IOUs”) in addressing near term financing needs, and recommend specific actions towards that end.

## **II. Background and Overview**

### **A. ChargePoint**

ChargePoint manufactures EV charging equipment, related infrastructure, and provides related network services. ChargePoint was a pioneer in the industry and is currently a market leader in deployment of EV infrastructure in California and elsewhere across the country. We

maintain the largest network of independently owned charging stations, with more than 1,496 MWh of electric fuel dispensed each month, the annual equivalent of 3,700,000 gallons of gas avoided and 56 million lbs of CO2 avoided. Drivers plug into a ChargePoint station more than 6,900 times every day (every 12 seconds). With more than 13,000 charging spots worldwide, we support more than 44,000 EV drivers using 66,000 mobile download applications.

ChargePoint has actively participated in every major proceeding and policy initiative targeting advancement of EV adoption in California.<sup>1</sup> Throughout these policy proceedings ChargePoint has consistently emphasized the potential of vehicle grid integration and advocated for the adoption of policies supporting and enabling smart charging, which in turn will enable EV drivers to provide grid services and thus offset initial costs of EV adoption. In addition we have promoted product and technology advancements to facilitate effective load management so that EV adoption can benefit all of California's ratepayers and minimize impacts on the grid.

#### **B. Using the OIR to advance EV adoption in California**

The OIR has very effectively identified the key tasks that will move the state's EV priorities forward and help move California toward the next stage of EV market transformation. At the same time, it will be important for the Commission to reaffirm its commitment to customer choice, market competition and innovation. The Commission should resist suggestions from some parties to weaken or roll back the competitive framework established in the Phase 1 and Phase 2 decisions. Rather, the goal of this proceeding should be to leverage the progress

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<sup>1</sup> See, e.g. comments of EVSP Coalition in Phase 1 and 2 of CPUC Rulemaking 09-08-009 (*Order Instituting Rulemaking on the Commission's own motion to consider alternative-fueled vehicle tariffs, infrastructure and policies to support California's greenhouse gas emissions reduction goals*); ChargePoint comments in CPUC Applications 12-11-001 through 004 (*Application of the California Energy Commission for Approval of Electric Program Investment Charge Proposed 2012 through 2014 Triennial Investment Plan and related matters*). ChargePoint (formerly Coulomb Technologies) has also been a member of the California Plug-In Electric Vehicle Collaborative, and active participant in development of the California ZEV Action Plan and in the California Energy Commission ("CEC") Renewable Fuel and Vehicle Technology Investment Plan process.

already made as a result of the Commission’s policies and investigate new opportunities to overcome obstacles to financing and optimize VGI opportunities. This, in turn, will serve the state’s central objective of enabling EV adoption, lowering costs for consumers, and spreading the benefits of EV adoption to all ratepayers.

As the Commission considers the scope and structure of this proceeding we recommend that the Commission identify and adopt guiding principles and goals to help focus the discussion and avoid wasting time on relitigation of issues addressed in previous phases of this proceeding.

From ChargePoint’s perspective, policies adopted in this OIR should:

- ❑ Encourage and support individuals and companies that want to participate in the wholesale markets for ancillary services and demand response
- ❑ Foster innovation by enabling use of state-of-the-art EVSE and communication infrastructure that is not dependent on older AMI devices and infrastructure
- ❑ Reaffirm the Commission’s commitment to competition, customer ownership of EVSE, customer choice, and innovation
- ❑ Support development of tariffs that enable smart charging, facilitate the provision of DR services and leverage technology incentives
- ❑ Encourage and support smart charging at workplace and multi-unit residential locations through appropriate rate structures and initiatives
- ❑ Continue support for development of a submetering protocol and submetering policies that support customer choice and networked charging for the benefit of the grid
- ❑ Identify and take advantage of near-term opportunities to enact rule changes that will remove barriers and move EV adoption forward
- ❑ Create appropriate opportunities for the IOUs to participate in innovative financing models aimed at achieving the kind of market transformation experienced in the California solar industry.
- ❑ Constructively explore the possibility of adapting the successful use of “on-bill financing” in energy efficiency programs to assist ratepayers in purchasing EVs and smart charging equipment

### **C. Midterm market assessment**

As noted above, ChargePoint has been a participant in the California market and in the Commission’s proceedings addressing EV issues from the outset. While our company is strong and working hard to help advance EV adoption in numerous forums and jurisdictions, some other early entrants in the EVSE market have not been as successful. Pointing to this recent

business turnover among EVSE providers, some have speculated in public interviews and in the December 4 workshop that the EVSE market as a whole may not be viable. This notion should be put to rest.

Business failure in early markets is normal. It is to be expected and indeed can be a sign of healthy competition among innovative companies trying out different business models. California is leading the world in adoption of electric vehicles, and the proliferation of EV charging infrastructure to support EV drivers will be critical to maintaining that position. The market for EVs continues to grow, and a diversity of successful EVSE business models has grown as well. Overall, customers are attracted to a wide range of products with varying capabilities to address their charging needs. A recent front page article in the November 12, 2013 New York Times business section entitled “A Recharging Industry Rises” points to the various industry players and the emergence of new entities in this nascent but strong market.<sup>2</sup>

The Commission is safe assuming that EVSE providers offering a diversity of equipment and services will compete to serve California EV drivers. The question is how to help EVSE market participants and their customers optimize the use of EVSE, whether it is Level 1, Level 2 or DC fast charger, for the benefit of the customer, the grid, utility ratepayers and the state as a whole.

#### **D. Role of smart charging**

Another mistaken assumption that needs to be addressed and corrected from the outset is that a particular level of charging service may be inherently preferable from a policy perspective. Nothing could be further from the truth. Overly simplistic statements such as the unqualified

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<sup>2</sup> [http://www.nytimes.com/2013/11/13/business/energy-environment/electric-cars-give-rise-to-a-recharging-industry.html?\\_r=0](http://www.nytimes.com/2013/11/13/business/energy-environment/electric-cars-give-rise-to-a-recharging-industry.html?_r=0)

preference for Level 1 charging voiced by one or two participants at the December 4 workshop may be misleading and are unhelpful.

ChargePoint supports deployment of Level 1 charging and optimizing its use to the extent possible and appropriate for the particular situation. In fact, ChargePoint deployed Level 1 stations in the market between 2008 and 2012.<sup>3</sup> But there is not one “right” answer for all customer applications and especially for optimizing VGI over time. Consumers should have choice in determining the charging equipment that works best for them. For example, Level 1 charging may be the right choice for many residential customers with a car in the garage overnight, but many others want and need Level 2. Faster charging together with cloud-to-cloud network services provides options and functionality that the Level 1 charging scenario repeatedly described by San Diego Gas & Electric Company’s representative does not.

The Commission should recognize the critical role of “smart charging” services in the grid integration platform. In defining the scope of proceedings to address rules, changes and removal of barriers for VGI we urge the Commission to:

- Encourage and support individuals and companies that want to participate in the wholesale markets for ancillary services and demand response. This means that the Commission should not stand in the way of individuals and companies that want to optimize their investment in EVSE by participating in available VGI and DR markets and programs.
- Foster innovation by enabling use of state-of-the-art EVSE and communication infrastructure that is not dependent on older AMI devices and infrastructure. In particular the Commission needs to reject the IOUs’ efforts to insist on use of the AMI network for provision of energy services and communication with EVSE.

#### **E. Role of the IOU**

At the December 4 workshop EPRI mentioned some utility customer polling data that supposedly indicates that customers view EV charging infrastructure and services as a “utility”

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<sup>3</sup> ChargePoint introduced smart Level 1 EVSE in 2008. In 2010 we introduced a combined Level 1 and Level 2 EVSE. In 2012 we discontinued our Level 1 products due to lack of interest from our customers.

function, and that they expect the utilities to be the default provider.<sup>4</sup> ChargePoint cautions the Commission not to confuse customer perception with customer preference. We have no doubt that some customers with no experience or knowledge of the EV or EV service markets might make the mistaken assumption that monopoly electric utilities likewise are the monopoly providers of EV fueling services. This misapprehension, to the extent it actually exists, will change as the markets and consumer awareness grow in size and sophistication.

The electric generation market provides a good example of how public perception can change as new technologies emerge and barriers to competition are eliminated. In the early 1980s, before enactment of the Public Utility Regulatory Policies Act, a consumer would likely have assumed that only a utility was capable of owning and operating a generating facility. Once institutional obstacles were addressed, new market participants and new technologies developed in the private sector emerged, and now most consumers are aware that electricity may be produced from a variety of sources, including independent energy producers and your next door neighbor.

The EPRI comment does highlight an important concern, however. In order to ensure that consumers understand that they have choices in charging equipment and services the Commission should continue monitoring the IOUs' customer information programs for compliance with the education and outreach guiding principles established in Phase 2 of Rulemaking 09-08-009, the predecessor to this proceeding.<sup>5</sup>

More fundamentally, the Commission should stick to its policy of protecting competition and encouraging innovation in EV charging products and services. The reasoning and concerns underlying the Commission's prior decision to prohibit utility ownership of behind the meter

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<sup>4</sup> "Utility Role in Addressing PEV Infrastructure," EPRI Presentation, CPUC VGI Financing Workshop, December 4, 2013.

<sup>5</sup> D.11-07-029 ("Phase 2 Decision") at 68-69.

EVSE except through an unregulated subsidiary still stand. Allowing the regulated utilities to “play” (as one utility participant put it) at their discretion in competitive markets for EVSE and EV charging services could risk undermining the nascent market and deterring outside investment just when it is most needed. We recognize that the Commission could decide at some point to revisit the utility ownership issue if and when the utilities “present evidence in an appropriate proceeding of underserved markets or market failure in areas where utility involvement is prohibited,”<sup>6</sup> in which case the Commission has committed to revisit concerns about potential cross-subsidization and the impact on market development, competition, customer choice and innovation.<sup>7</sup> In summary, we recommend that the Commission:

- Reaffirm the Commission’s commitment to competition, customer ownership of EVSE, customer choice, and innovation. In particular the Commission should not support proposals to reopen any previous policy decisions in the scope of this proceeding, including the prohibition against utility ownership, unless and only to the extent that the IOUs are able to present evidence in an appropriate proceeding of underserved markets or market failure and address concerns previously recognized by the Commission.

The Commission should explore how the utilities can best use their unique strengths and capabilities to help advance EV adoption in California. For example, the utilities will be crucial participants in developing new tariffs to enable effective managed charging and participation in DR and other VGI programs.

Recognizing this, ChargePoint urges the Commission to:

- Support development of tariffs that enable smart charging, facilitate the provision of DR services and leverage technology incentives and
- Encourage and support smart charging at workplace and multi-unit residential locations through appropriate rate structures and initiatives.

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<sup>6</sup> Phase 2 Decision at 50.

<sup>7</sup> Id. at 49-50.



### **III. Creating new financing opportunities**

The OIR identifies financing as a key subject for discussion in this proceeding, and defines the potential range of issues for discussion broadly:

...this proceeding will explore how financing opportunities can unlock long-term values in PEVs or reduce upfront costs as a means of accelerating PEV adoption and infrastructure deployment, including medium- and heavy-duty vehicle infrastructure. Financing opportunities could occur at different levels of the PEV value chain, including battery companies, automakers, charge companies, infrastructure manufacturers, fleet operators and PEV drivers. Specifically, we will explore what role, if any, the utility can play in helping facilitate PEV-related financing and investment strategies.<sup>8</sup>

The Commission's recognition of the role of financing to help emerging industries scale up is both accurate and timely. ChargePoint looks forward to participating in this discussion and offers the following initial thoughts. ChargePoint discusses financing initiatives and on-bill financing in more detail below.

#### **A. Financing support for EVs and charging infrastructure investment**

Perhaps the most actionable lesson learned from the ECOTality bankruptcy is that a 100% government subsidized business model does not work. The work being done by the Governor's office and the National Advisory Group to explore private sector financing is one that we see as critical to the long term viability of the market.<sup>9</sup> States such as New York and Connecticut have developed Green Banks to leverage private investment more effectively into the energy markets. Both are actively considering a role for the banks in the EV infrastructure market.<sup>10</sup> In looking at the success of distributed solar development over the past five years, we can identify best practices and lessons learned in promoting the evolution of EV infrastructure in California. A

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<sup>8</sup> OIR at 21.

<sup>9</sup> See "Unlocking Private Sector Financing for Alternative Fuel Vehicles and Fueling Infrastructure" Center for Climate and Energy Solutions; National Association of State Energy Officials (NASEO).

<sup>10</sup> See New York State Energy Research and Development Authority (NYSERDA) Petition Regarding the New York State Green Bank Initiative, Case 13-M-0412, Comments of ChargePoint, Inc.

key game changer in that sector has been the opening up of deep low cost debt funding solutions-  
-with minimal dependence on government subsidies. The following comments outline the case  
and need to support private sector financing to unlock the potential for EV adoption in  
California. These comments envision a possible role for the utility as an equity sponsor or  
commercial participant in an “EVSE Deployment Fund” and/or utilization of existing utility-  
sponsored financing programs (e.g. on-bill financing).

### **1. Moving to private sector investment**

The State of California has committed tens of millions of dollars of AB 118 money to  
grants to make charging stations more affordable. This will help incentivize new installations.  
However, as has been demonstrated by many other newly commercialized clean energy  
technologies, reduction in upfront costs through grants alone often does not lead to significant  
penetration, and in fact may create perverse customer behavior (e.g. siting of charging stations in  
low-utilization areas).

As the purchase of charging stations still requires a significant amount of cash on hand,  
ChargePoint has been actively discussing the development of financial products to address these  
barriers inhibiting customer adoption. ChargePoint has been in discussions with state officials  
and agencies (Governor’s office, CEC, CARB) regarding potential scalable EVSE financing  
models that leverage the private capital required to meet the state’s goals. Ownership models  
that are suited to financing will require new structures and financial partners that could be  
offered to both public and private customers. These models may be debt, credit enhancements,  
tax equity, and/or subsidized sponsor equity solutions that utilize federal and state subsidies. As  
has been seen in the residential solar industry, it is only when large amounts of private capital is  
made available for financing that consumers adopt the new technology at meaningful scale.

## **2. Parallels with solar development**

EV charging infrastructure has the potential to follow the growth evolution that the solar rooftop sector demonstrated in the mid-late 2000's. Similar to the EVSE sector, distributed solar development was initially funded primarily by federal/state sources in the form of generous grants and subsidies. However, it was the advent of attractive financing options (leases, PPAs, etc.) that dramatically scaled customer adoption in the state. By leveraging federal/state financing subsidies such as tax credits, this sector secured attractive third-party capital to offer customer solutions that overcome barriers to adoption. Now the solar sector is transitioning to a 100% private-funded model as the lowest-cost funding providers (banks, institutional funds, etc.) have seen the track record of solar and are committing large pools of capital to fund future growth.

## **3. Market game changer fund**

Drawing upon financing technologies from the solar and energy efficiency sectors, ChargePoint is developing a new paradigm to help facilitate the necessary transition from a 100% government-funded model to a private sector-funded model. Below are the elements of what ChargePoint has coined an "EVSE Deployment Fund" which is aimed at facilitating large scale deployment of EV charging stations in California and across the US. In brief, the EVSE Deployment Fund would:

- Overcome the current unattractive ROI paradigm associated with EVSE ownership by eliminating the customer's upfront budget/cost requirement and aligning future EVSE benefits (station utilization revenues, workplace amenities, energy management, etc) with future customer cost
- Secure attractive low-cost private sector capital and government subsidies to cover upfront installation costs and convert EVSE ownership into a pay-as-you-go model

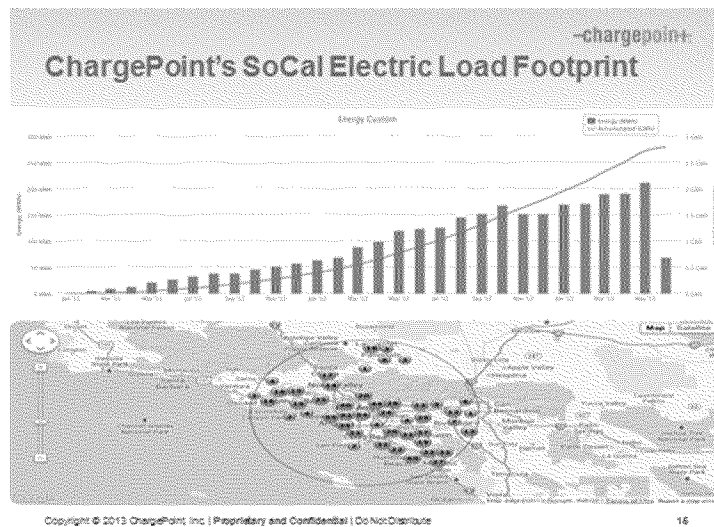
- Create third-party ownership model which can more efficiently monetize available tax attributes associated with EVSE ownership and lower annual payments owed by customers

#### **4. Role of utilities**

As a potential participant in financing, the utility could actively promote rapid acquisition of EV charging infrastructure. Importantly, the ability of the utility to enter into large scale deployment programs as an investor in a third party model would facilitate the interest of the financial community and enable the attraction of long term capital into this sector. There may be other roles and opportunities for the utility to use their balance sheet of scale and size to command lower financing costs for EV infrastructure. These structures do not necessarily involve ownership but could involve value sponsorship of procurement programs with third party ownership models.

The benefits of utility involvement need to be explored thoroughly. However some initial benefits include using their low cost of capital to drive down customer costs, contributing to a scalable replicable solution to meet the state's infrastructure needs, and increasing the demand for electric vehicles.

The economic proposition is supported because the incremental load from adoption level 2 and DC quick chargers represents a significant revenue opportunity. This load growth can be viewed as a counterbalance to lost revenue associated with distributed generation and energy efficiency market adoption. Below is a chart demonstrating the load growth footprint of ChargePoint stations in SCE's service territory:



The win/win proposition places the utility in the strategic position of supporting the competitive market as well as contributing to lower cost for consumers. Coupled with integrated VGI services contemplated by the OIR, the ratepayer benefits are spread across the spectrum. Looking beyond the traditional utility function, ChargePoint believes the IOUs can play a critical role in development of new financing structures and opportunities. To this end we encourage the Commission to:

- Host a special workshop on financing issues to explore, among other issues, what has historically prevented utilities from financially participating in this space –including rate basing constraints and how this issue could be addressed in this OIR process;
- Explore the development of PPP (Public Private Partnership) financing solutions to accelerate scaled adoption of EV infrastructure;
- Consider regulatory approval of rate structures to incentivize IOU sponsorship in this sector that are consistent with the ownership restrictions and competitive market framework adopted by the Commission;
- Create appropriate opportunities for the IOUs to participate in innovative financing models aimed at achieving the kind of market transformation experienced in the California solar industry; and
- Constructively explore the possibility of adapting the successful use of “on-bill financing” in energy efficiency programs to assist ratepayers in purchasing EVs and smart charging equipment (see discussion below).

## **B. On-bill financing**

ChargePoint strongly encourages the Commission to explore on-bill financing (“OBF”) as a tested and effective model for enabling customer investment in EVs and smart charging equipment.

By way of background, OBF was initially approved as part of Southern California Edison Company (“SCE”) and SDG&E’s 2006-2008 Energy Efficiency Portfolio Plans.<sup>11</sup> PG&E did not initially include OBF in its plan because a billing system upgrade precluded implementation, but PG&E informed the Commission of plans to pilot test an internet-based financing option for small business in 2006. In 2007, the Commission directed the utilities to continue OBF pilots for institutional customers and to investigate expansion to other sectors such as residential in the 2009-2011 EE portfolio filings. The CPUC Strategic Plan adopted in Decision 08-09-040 called for creation of a Finance Task Force to explore partnerships and lending solutions, need, methods to attract capital and explore expanding OBF offerings. The IOUs collaboratively developed OBF parameters for commercial and institutional customers, and the Commission authorized the programs in Decision 09-09-047, which includes a useful summary of background on the evolution of OBF.

Most of the utilities have programs providing on-bill financing for energy efficiency equipment. OBF funding supports many technologies, including lighting, HVAC, electric motors, LED Street lights, refrigeration, and food service equipment and water pumps.<sup>12</sup> The utilities propose eligibility requirements and allow for certain third party participation in their programs. This model is clearly transferable to EVSE. Providing 0% interest loans that enable

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<sup>11</sup> See D.05-09-043.

<sup>12</sup> See, e.g.

[http://www.pge.com/en/mybusiness/save/rebates/onbill/index.page?WT.mc\\_id=EEF\\_awareness\\_digital\\_textad\\_paf\\_Adwords\\_%2Bpg%26e%20on-bill%20financing\\_b\\_c\\_37011876886\\_g](http://www.pge.com/en/mybusiness/save/rebates/onbill/index.page?WT.mc_id=EEF_awareness_digital_textad_paf_Adwords_%2Bpg%26e%20on-bill%20financing_b_c_37011876886_g)

EV customers to invest in smart charging equipment in lieu of out-of-pocket investment will address a major barrier to widespread EV adoption.

Today on-bill financing programs are closely tied to energy efficiency, so adapting this model for customer investment in EVSE would require either expanding the scope of the existing EE program or creating a separate program modeled on the EE example. ChargePoint recommends discussion of which approach would be simplest to adopt as quickly as possible from an administrative perspective. Certainly EVs are more efficient than gas-fueled vehicles, and EVSE enables additional efficiencies in the charging process. To the extent that equipment facilitates managed charging, participation in DR programs and/or ancillary service markets, the initial customer investment will be leveraged for the benefit of the customer and the grid.

#### **IV. Initial response to OIR questions**

##### **A. Vehicle-to-Grid**

ChargePoint will defer responding to the OIR questions on VGI at this time and provide answers as part of its comments on the VGI White Paper and workshop report.

##### **Alternative Fuel Vehicle Rate Design Policy**

###### **1. *What is the utility experience to date regarding customer election to use PEV-specific tariffs?***

ChargePoint is not a utility and so cannot answer this question. However, we look forward to reviewing the IOUs' responses and will provide reply comments as appropriate.

###### **2. *What issues need to be considered when designing PEV rates for residential charging?***

In designing PEV rates for residential charging the Commission should provide meaningful incentives for charging during time periods when demand is low and resources to meet that demand (including renewables) are most available. As discussed in the White Paper, these optimal charging periods are not uniformly predictable, and so the Commission should not

rely solely on time-of-use rates but also focus on rate design and other incentive mechanisms that encourage and reward participation in managed charging platforms.

The Commission should develop PEV rates specific to multi-unit residential charging. These rates should be structured to encourage landlord participation, reward charging off-peak and at other optimal time periods, and provide a meaningful incentive for participation in managed charging.

**3. *Should the Commission consider new rate tariffs for workplaces providing PEV charging?***

Yes. Tariffs that support “smart” workplace charging are a critical component in the overall strategy to support consumer investment in EVs. ChargePoint agrees with the Commission that “incentivizing smart charging can help move charging to the morning hours before the afternoon peak, minimize the need for distribution upgrades, and avoid demand charges.”<sup>13</sup>

**4. *How can residential and workplace PEV rates incentivize smart charging and allow controlled charging?***

ChargePoint does not have specific recommendations at this time on the design of residential and workplace PEV rates to incentivize smart charging and allow controlled charging. Discussion of rate design in this area should be coordinated with efforts to advance submetering, integrated billing, and on-bill finance.

**5. *How should the Commission address demand charges for medium- and heavy-duty plug-in electric vehicles?***

As noted in the OIR, imposing demand charges on some heavy-duty customers such as transit agencies may discourage electrification. The Commission should thoroughly explore the

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<sup>13</sup> OIR at 19.



alternatives to demand charges, and involve affected customers and potential customers (e.g. municipal transit agencies) in the discussion of rate options and solutions.

**6. *What changes, if any, are needed to tariffs related to compressed natural gas vehicles?***

ChargePoint has no comments on this question at this time.

**7. *What other issues related to alternative fuel vehicle rates should the Commission address?***

See comments above.

**B. Financing**

**1. *Should the Commission direct the utilities to provide financing to customers to encourage PEV adoption? If so, what financing options should be considered?***

Yes. See discussion above.

**C. General**

**V. Comments on scoping**

ChargePoint supports the preliminary scoping of this proceeding. The Commission may find it more effective to address financing issues as a stand-alone issue area rather than integrating it separately into discussions of VGI and rate design. ChargePoint supports the preliminary categorization of this proceeding as quasi-legislative, and agrees with the preliminary determination that a hearing will not be needed.

**VI. Conclusion**

ChargePoint appreciates the Commission's initiative and commitment to address issues relating to expanded use of alternative-fueled vehicles in California. The proposed focus on VGI, rate design, utility-supported financing, and ongoing work to implement integrated billing of EV loads is exactly on point, and the work we do in this proceeding will help create the conditions for a significant expansion of EV adoption in California. We look forward to working

with the Commission, the IOUs, and other stakeholders to achieve the state's goals for EV use and to build the network of charging infrastructure necessary to support the state's EV users.

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Respectfully submitted,

By: \_\_\_\_\_ /s/

Colleen Quinn  
Vice President Government Relations and  
Public Policy  
ChargePoint, Inc.  
1692 Dell Avenue  
Campbell, CA 95008  
Phone: (917) 523-1813  
Email: [Colleen.Quinn@chargepoint.com](mailto:Colleen.Quinn@chargepoint.com)