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ChargePoint Comments on Electric Vehicle Infrastructure Project Funding

Additional submitted attachment is included below.



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December 21, 2021

California Energy Commission
Docket Unit, MS-4
Re: Docket No. 20-TRAN-04
1516 Ninth Street Sacramento, CA 95814-5512

Re: Docket number 20-TRAN-04, Electric Vehicle Infrastructure Project Funding

ChargePoint appreciates the opportunity to provide comments on the California Energy Commission (CEC) Funding Ideas for Light-Duty Electric Vehicle Charger Infrastructure Projects Workshop.

Since 2007, ChargePoint has been committed to making it easy for businesses and drivers to go electric, with the largest electric vehicle (EV) charging network and most complete set of charging solutions. ChargePoint has enjoyed numerous partnerships with the CEC. Together we have helped accelerate EV charging deployment in rural communities, along highway corridors, and at multifamily properties. In addition, we have increased California-based EV charging manufacturing and supply chains and stimulated clean energy jobs throughout the state. ChargePoint continues to create the new fueling network to move all people and goods on electricity and looks forward to continued partnership with the CEC.

The Clean Transportation Program's investments will play a critical role in supporting Governor Newsom's Executive Order, calling for 100% of new vehicle sales to be zero-emission within 15 years. We commend CEC staff for the efforts to engage stakeholders in developing the plan and hope the comments below help inform this process.

Local Government Fleet Charging

- 1. Restricted fleet charging or include public charging?** Local governments should have flexibility to restrict access to their fleet vehicles exclusively or allow the public access the chargers at times when the chargers are not needed by the fleet. Many networked chargers are able to facilitate access control. This feature will ensure that the chargers are always available when the fleet needs them while remaining flexible to accommodate the evolving needs of fleet operators.
- 2. First-come, first-served? Or competitive solicitation?** In order to ensure investments are made in the communities that will provide the greatest impact,

funding should be administered through a competitive solicitation. This approach will enable the CEC to select the most impactful and shovel ready projects through quantitative and qualitative criteria rather than the applicants that are able to submit an application the fastest.

3. **Equity by air district? By region? By size?** The CEC should administer funds by region. A regional approach can be structured to ensure equity through quantitative and qualitative criteria.
4. **Reward implemented streamlined permits for chargers?** Jurisdictions with streamlined permitting for chargers should be prioritized for investment. The CEC should consider technical support for underfunded jurisdictions that are unable to implement streamlined permitting measures. However, it would be appropriate for that support to be provided through a separate solicitation.
5. **Should fund the whole electric supply or just the vehicle charging?** Electric supply should be an eligible expense. The competitive scoring criteria should reward applicants that are able to keep electric supply costs to a minimum. This approach will motivate applicants that are capable of leveraging other programs or funds to do so, while allowing applicants that are unable to leverage other programs or with leaner budgets to participate in the program.

DC Fast Charger Corridors

1. **From the presented four possible concepts, how would you order them for level of importance?** We would order the concepts in the same order they were presented in the workshop. 1) Additional corridors, 2) Identify and fill corridor charging gaps, 3) Utilize stub outs for expansion, 4) Drive-thru / Parallel charging station.

The CEC should focus its efforts on building new corridors and closing gaps within existing corridors. These efforts will provide the greatest returns on building range confidence while accelerating electrification efforts in underserved communities. The CEC's corridor funding has served as a catalyst in many communities that were charging deserts. In our experience, the CEC's investment serves as a catalyst to build out infrastructure in the surrounding community and attract additional EV charger investments by the private sector. The CEC should focus on new communities to maximize the impact of these investments.

Leveraging programs such as the Low Carbon Fuel Standard, CALeVIP and Air District grants is a great way to subsidize expansion at existing DC fast charger corridor sites. We do not feel an expansion solicitation from the CEC is warranted.

Drive-thru and parallel charging stations should be explored through a demonstration project. The project should encompass multiple site types, quantitative and qualitative analysis to determine the most optimal configurations



for various use cases. BESTFIT 2 may be an appropriate vehicle to explore and examine these concepts.

- 2. Which corridors with little or no DC fast charging currently available would you prioritize and why?** CEC should focus on serving all of California's highway corridors; closing gaps and building redundancy on all that were eligible under GFO-15-601, 602, 603 and GFO-16-005. Additionally, the CEC should focus on US-101, CA-1, I-15, I-210, I-405, I-605, US-91, CA-330, CA-299, and CA-49. Building new corridors, filling gaps and increasing the density of DCFC opportunities across California's vast expanse of highway corridors is critical to enabling the flow of all people and goods via electricity.
- 3. What should the minimum power level for DC fast chargers on corridors?** While 150kW or 350kW may be appropriate for some locations, 50kW or 100kW may be suitable for sites that lack access to power or do not have enough projected utilization to provide a positive return on investment within a reasonable timeframe. Additionally, while some sites may fit the use case where a driver is looking to charge as quickly as possible and get back on the road, other sites may warrant a longer visit of 30-40 minutes if drivers are shopping, eating, or visiting a point of interest. Providing flexibility with respect to charging speeds will allow site hosts to best align charging speeds with the drivers they are serving and the particular use case for EV charging at the site.
- 4. Are there other DC fast charger corridor concepts we should consider?** The CEC should consider a resiliency and emergency management concept through a demonstration program. The state's infrastructure must be prepared to respond natural disasters such as wildfires and earthquakes as well as Public Safety Power Shutoffs. Communications to drivers and delivering electricity to power critical EV charging infrastructure along corridors and emergency evacuation routes is paramount to achieving the state's transportation electrification goals.

BESTFIT 2

- 1. Should any changes or improvements be made to the design of the BESTFIT solicitation?** BESTFIT is the most actionable and straightforward product development/commercialization government grant program available to the industry. We are very pleased to see this program become available in a second iteration and do not have any recommended changes to the program's design.
- 2. Should the 3 Areas of Focus remain the same, or are there other challenges we should consider addressing?** The CEC should consider resiliency and emergency management. Building out more capabilities in these areas is critical to safety.
- 3. Is a maximum award of \$1M the right amount?** We encourage the CEC to increase the maximum award to \$2M. This amount is in line with the medium and

heavy-duty category in the first iteration of BESTFIT. A \$2M cap is more appropriate for California-based commercialization efforts which are subject to high labor and real estate costs. A \$2M cap will enable more impactful projects to come forth while maintaining California's leadership position in advanced vehicle technology commercialization.

- 4. Should we have a 2-phase application process (initial 5-page abstract, followed by a full application if the abstract passes)?** We support a 2-phase application process. The abstract is an efficient way for applicants to scope out projects and receive feedback from the CEC. The two-phase process works well for Department of Energy Funding Opportunity Announcement grant opportunities and worked well in the first iteration of BESTFIT.

High Density Level 2 Charging

- 1. Which project type is most visible to drivers?** Charging station sites with fewer than 10 charging stations tend to blend into the built environment. Large charging hubs overcome this issue by visually becoming a destination. When sited in highly trafficked and highly visible locations such as shopping centers, workplaces and arenas, large charging hubs can become a point of curiosity and conversation. Other elements that may contribute to visibility of large charging hubs may be locating them along a property edges, visible to passing traffic, art installations on surrounding walls and parking spaces or locating the hub directly in front of a drivers' ultimate destination (e.g., storefront).
- 2. Which project gives drivers the most charging confidence?** Driver confidence will grow when drivers can visualize EV charging as part of their everyday life. This lends itself to large charging hubs at workplaces and retail locations where drivers can witness EV drivers carryout everyday activities (e.g., commuting, shopping) with minimal effort. Repetition is key. When drivers witness their colleagues plug their EVs in at a work environment or see people charging their cars every time they go to their favorite supermarket, normalcy ensues. With normalcy comes confidence.
- 3. What are the characteristics of the charging environment needed to shift a driver's attitude from uncertain about charging availability to confident about charging options?** Please see previous response. Drivers need visibility and familiarity. When drivers can visualize EV charging as part of their life through representation a see drivers successfully charge, confidence grows.
- 4. Are there other project types we should be considering?** The CEC should consider Level 2 charging hubs within densely populated multifamily communities. Centrally located charging hubs near high density housing provides a unique awareness opportunity. These communities provide housing to scores of people and many of them pass through the common areas each day. Locating Level 2 charging hubs in these communities may accelerate driver confidence in charging options and availability through proximity and familiarity.

Low-Income Residential Charging

Multifamily charging continues to be one of the most challenging segments in the industry. We encourage the CEC to allocate any funding planned for low-income, single family residential charging to low-income, multi-family charging. There are numerous, income qualified, single family residential charging programs throughout the state from air districts and utilities. The CEC's leadership is most needed on addressing the challenges with low-income, multifamily charging.

Block Grants for Light-Duty EV Charging Infrastructure

- 1. Are there other ways to differentiate the two future Block Grants?** We are supportive of the proposed approach with dedicated swim lanes under EnergIIZE Commercial Vehicles, launching Q1 2022. Translated for CALeVIP and light duty EVSE this could be "fast track" for projects that are truly shovel ready with a permit issued, and a competitive or public charging lane similar to how CALeVIP operates today. Additionally, CEC should provide sites located in disadvantaged and low income communities with additional time to submit required documents and targeted assistance similar to what is being proposed for EnergIIZE.
- 2. Should projects be regionally targeted, statewide, or offer both?** We are supportive of a regional approach similar to how CALeVIP operates today. A regional approach can be structured to ensure equity through a targeted approach, generating interest and helping to drive investment.

Expanded Use of Physical Signs at EV Charging Sites to Promote ICE Driver Awareness

- 1. What is your perspective on how effective this proposal could be in increasing ICE driver awareness of available and nearby chargers?**
- 2. Does your company or organization have any experience and lessons-learned from signage installations with local government and CalTrans District Offices?** Yes. Local governments vary in their approach to signage. In our experience, many will give permission for signage to be installed, but a few may not authorize signs to a destination on private property or a destination in a different jurisdiction. Some will not authorize signs at all. It can also be challenging to know where a local jurisdiction right of way ends and where the Caltrans right of way begins. For these reasons, we believe it would be most efficient to fund local jurisdictions directly to install signage on their rights of way (i.e., the "Regional Readiness" concept) and to coordinate with CalTrans on highway signage.
- 3. How useful would General Service signs – with a company logo and name – be to increasing brand value for your firm?** We believe branded signs could provide value for the site host brand and may help EV drivers find the charging site more easily. But for the purpose of increasing awareness of EV charging among ICE drivers, branding is not critical. Furthermore, some local jurisdictions may be more inclined to support non-branded signage.



ChargePoint looks forward to continued collaboration with the CEC to accelerate the state's transportation electrification goals. Please do not hesitate to contact me at dedrick.roper@chargepoint.com if you have any questions or if we can provide additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Dedrick Roper".

Dedrick Roper
Director, Public-Private Partnerships
ChargePoint