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AEE Comments on Light-Duty EV Infrastructure Allocation Workshop Presentation

Additional submitted attachment is included below.

January 8, 2021

California Energy Commission
1516 Ninth Street
Sacramento, California 95814

Re: Docket 20-TRAN-04 – Staff Workshop on Funding Allocations for Future Electric Vehicle Infrastructure Projects

Dear Commissioners and Staff:

Advanced Energy Economy (AEE) respectfully submits these comments in response to the California Energy Commission's (CEC) December 17th workshop inviting stakeholder comment on funding allocations for future electric vehicle (EV) infrastructure projects. AEE strongly supports the CEC's transportation electrification (TE) objectives and notes that Governor Newsom's recent Executive Order N-79-20 will require an "all hands on deck" approach to accelerate EV infrastructure deployment. We thank the CEC for the opportunity to comment and look forward to the development of new projects that grow the EV market, support underserved communities, and build on past EV infrastructure programs.

I. INTRODUCTION

AEE is a national association of businesses dedicated to transforming public policy to enable a clean, secure, affordable energy future. We are comprised of over 80 companies both large and small across the technology spectrum, including electric vehicles (EVs), energy efficiency, solar, wind, storage, fuel cells, biofuels, demand response (DR), advanced metering, and enabling software. As an organization with stakeholders that provide a range of technologies and services, we balance a wide variety of interests and address issues with a technology-neutral perspective. As it relates to TE, AEE's membership includes manufacturers of electric vehicles, fleet owners, charging infrastructure providers, grid integration solution firms, and companies providing supporting technologies and software services.

II. COMMENTS

AEE appreciates the opportunity to offer feedback at this early stage of the CEC's development of new EV charging infrastructure projects. While AEE looks forward to providing more in-depth comments once project concepts are further refined, we respectfully ask the CEC consider AEE's feedback below.

Support for public EV charging in high-density areas can support the goals of several project concepts.

In its recent infrastructure deployment assessment pursuant to Senate Bill (SB) 1000, the CEC found that there are fewer public EV chargers in dense, highly-populated census tracts than other areas in the state.[1] This is especially troubling given the large proportion of apartment dwellers who rely on public charging for their needs, as they often lack on-site parking, let alone home charging. Without a reliable, robust, and accessible network of charging infrastructure in major metropolitan areas, California will continue to face hurdles in driving the EV adoption needed to meet state goals. CEC's findings clearly point to a need for more visible, accessible public EV chargers in these densely populated areas to support market growth. Further, any new programs that focus on charging in densely populated areas should consider unintended consequences of CEC's requirements for 24/7 access, as this requirement in the past has rendered some locations ineligible in urban populations, where mixed use development and night gates are more common than open surface lots with 24/7 access in more suburban or rural locations.

In its December 17th workshop, the CEC also identified a range of project concepts aimed at meeting the charging needs of multi-unit dwelling (MUD) residents[2], transportation network company (TNC) drivers[3], and other drivers that lack access to residential EV charging.[4] Fortunately, the CEC can begin to simultaneously address the charging needs of these drivers and the charging gaps identified in the SB 1000 infrastructure assessment by supporting public EV charging – particularly fast charging – in high-density areas. If deployed effectively, fast

[1] https://efiling.energy.ca.gov/GetDocument.aspx?tn=236189&DocumentContentId=69167
[2] CEC Presentation at Slide 66.
[3] *Id.* at Slide 45
[4] *Id.* at Slide 62

charging can pull triple-duty by satisfying the needs of nearby MUD residents, providing refueling opportunities for TNC drivers, and allowing for other drivers that face residential charging barriers the opportunity to charge an EV close to home.[5] These driver profiles are typically concentrated in denser areas of the state and will be instrumental in the establishment of a broader, more diverse EV market. In view of the SB 1000 infrastructure assessment and the CEC's desire to address the charging needs of underserved market segments, AEE recommends that CEC consider funding for public EV charging infrastructure – particularly fast charging infrastructure – to spur incremental EV adoption. Efforts such as the Colorado Energy Office's *Electric Vehicle Direct Current Fast Charging Plazas Program* should be considered as a model for encouraging investment in EV charging infrastructure in dense metropolitan areas.[6]

Any Vehicle-Grid Integration projects should be coordinated with the California Public Utilities Commission and investor-owned utilities where appropriate.

AEE applauds the consideration of Vehicle-Grid Integration (VGI) in the CEC's project concepts, and we strongly support VGI's role in ensuring that TE enhances the reliability and flexibility of the grid to the benefit of utility customers.[7] As CEC staff are aware, California has already taken steps to advance VGI with the passage of SB 676[8] and the California Public Utilities Commission's (CPUC's) subsequent decision, D.20-12-029[9], regarding the implementation of VGI strategies across the state's investor-owned utilities (IOUs). Notably, the recent decision authorizes the IOUs to spend up to a collective $35 million on VGI pilots, permits additional funding for VGI studies, and requires that the IOUs coordinate with the CEC on the development of these initiatives.[10] To the extent the CEC develops a VGI-oriented project as proposed during the December 17 workshop, AEE recommends that staff consult with the CPUC and IOUs early on to determine where and how much additional CEC funding is

[5] Many single-family homes in dense census tracts may not have dedicated off-street parking to enable convenient residential charging.
[6] https://energyoffice.colorado.gov/zero-emission-vehicles/electric-vehicle-direct-current-fast-charging-plazas-program
[7] CEC Presentation at Slide 60.
[8] https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200SB676#:~:text=SB%20676%2C%20Bradford.,%3A%20electric%20vehicles%3A%20grid%20integration.&text=The%20bill%20would%20require%20electrical,the%20electric%20vehicle%20integration%20strategies.
[9] http://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=355794454
[10] *Id.*

necessary to support VGI programs that the IOUs will implement. The CEC may also consider targeting funding to support VGI efforts in communities that are not served by IOUs.

AEE would like to provide one note of caution. Given the importance of VGI in supporting California's EV goals and the relatively low financial barriers to deploying Level 1 (L1) charging equipment, AEE questions the value of dedicating limited CEC funding to supporting L1 charging against other technologies that can more readily support grid and utility customer needs.

All other potential project concepts should seek to complement the initiatives of other entities and leverage open standards to ensure that CEC funding provides the greatest value toward meeting state goals.

The December 17 workshop identified a wide range of project concepts to support TE across an array of market segments, use cases, and technology demonstrations. While AEE recognizes that many of these efforts are necessary to accelerate TE in an efficient and equitable manner, it is important to focus limited CEC resources on high-value projects that make it easier and more convenient for California drivers to transition to EVs. The goal should be to complement existing efforts and take into account lessons learned from other entities in the EV charging infrastructure space, including but not limited to other state agencies (including those outside of California, such as the Colorado example mentioned above), EV charging service providers, national laboratories, utilities, metropolitan planning organizations, air quality management districts, ports, and airports. For example, many of the initiatives contemplated during the workshops are already being pursued via other CEC initiatives (i.e. CALeVIP), utilities, or both. AEE does not strictly oppose the use of Clean Transportation Program funding toward technologies and market segments covered by existing projects, but we ask the CEC to consider how its project concepts will provide the "additionality" needed to accelerate EV adoption.

Finally, to ensure EV charging assets remain used and useful, encourage customer choice, support a more consistent charging experience for EV drivers, and complement existing EV load management efforts, AEE recommends that the CEC take an active role in supporting open

standards and interoperability for EV charging equipment and software. CEC has held several workshops in recent years that contemplate the adoption of such standards and the agency has extensive knowledge of EV charging technology trends; the CEC should leverage this experience to develop commonsense program requirements that help certify the EV charging infrastructure being put in the ground today will enable EV charging to be more convenient, secure, and affordable for all drivers. As a starting point, the CEC should use this project funding opportunity to require third-party OCPP certification for all qualified CEC-funded EV charging equipment. The CEC should also consider adopting project provisions that adopt widely accepted standards for VGI communication where appropriate – particularly in light of the rapid growth in EV adoption identified in CEC's recent AB 2127 EV Charging Infrastructure Assessment.[11]

III. CONCLUSION

AEE appreciates the CEC's leadership on this critical issue and asks the Energy Commission to consider our comments in the development of future EV infrastructure projects.

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[11] https://efiling.energy.ca.gov/getdocument.aspx?tn=236237