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CalETC's Comments on Draft Concepts for EV Charging in MUD and Rural Areas

Additional submitted attachment is included below.

CalETC
California Electric Transportation Coalition

July 21, 2021

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

Submitted to on-line portal: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=20-TRAN-04

Re: Comments on EV Charging for MUD and Rural Residents

The California Electric Transportation Coalition (CalETC) appreciates the opportunity to provide feedback on the Draft Solicitation Concept for Electric Vehicle Charging for Multi-Unit Dwelling (MUD) Residents and the Draft Solicitation Concept for Reliable Rural Charging Solutions (Draft Concept(s)). We greatly appreciate the time and effort it took to organize the workshops and prepare these Draft Concepts, and we appreciate the CEC staff's flexibility by allowing these comments to be filled after the deadline.

CalETC supports and advocates for the transition to a zero-emission transportation future to spur economic growth, fuel diversity and energy independence, contribute to clean air, and combat climate change. CalETC is a non-profit association committed to the successful introduction and large-scale deployment of all forms of electric transportation. Our Board of Directors includes representatives from: Los Angeles Department of Water and Power, Pacific Gas and Electric, Sacramento Municipal Utility District, San Diego Gas and Electric, Southern California Edison, Southern California Public Power Authority, and the Northern California Power Agency. In addition to electric utilities, our membership includes major automakers, manufacturers of zero-emission trucks and buses, electric vehicle charging providers, autonomous electric vehicle fleet operators, and other industry leaders supporting transportation electrification.

We would like to applaud the CEC's effort on these Draft Concepts. Both MUDs and rural areas are challenging segments to install charging infrastructure, and therefore, deserve the attention and funding the CEC has dedicated. These Draft Concepts speak to the CEC's commitment to ensure charging infrastructure is located in California's equity and rural communities. We support these Draft Concepts and respectfully make the following suggestions to improve already stellar proposals.

One overarching concept is that we believe the requirements listed below should not be required, but rather considered optional and scored higher if a particular project satisfies the criteria, but not disqualify an applicant if they are unable to meet the criteria. Siting projects for MUDs and rural areas present a wide range of challenges. Flexibility around siting criteria will allow applicants to propose projects that have a wider variety of characteristics and allow CEC staff to review a range of projects and select the ones that best serve the needs of the MUD or rural residents.

We also support the Draft Concepts' requirement that the chargers be network capable but not require networking. To meet our climate and zero-emission vehicle goals, California needs to rapidly

expand access to charging. The CEC's AB 2127 Report found that we need to install 1.2 million charging ports in the next 8.5 years to meet our goals in 2030. Allowing applicants to design low-cost charging solutions for MUDs or rural areas will help expand access to charging in places where costs could otherwise discourage installation. The Draft Concepts preserves the option to network or be network capable, which maintains flexibility for project design.

Charger Siting for MUDs

CalETC recommends the Draft Concept define MUD to clarify whether single-family attached housing is included. Single-family attached housing includes duplexes to quadraplexes and townhome condos. It would be useful to clarify that the Draft Concept is directed at building charging for use by high-density housing. A definition for MUD would also help clarify the areas where applicants should look to build projects.

CalETC recommends that the requirement for offsite charging be within ½ mile of the MUD being served be optional. Ideally, offsite charging would be located within a ½ mile of an MUD making it easy for residents to walk from their houses to the charging station. Close siting to the MUD is relevant for Level 2 charging, which would likely require the car to be charging for at least an hour or more. Therefore, we recommend not requiring Level 2 charging stations to be within a ½ mile but give more weight to sites that are proposed closer to MUDs than those that are farther away. Alternatively, offsite Level 2 charging could be required to be within one mile of the MUD being served and still give more weight to sites that are closer.

Close siting to the MUD is not as important for DC fast charging, which typically requires shorter charging times. It is more desirable to have amenities close to DC fast charging stations that are useful for drivers. Using the analysis from the CEC's SB 1000 report, it would be appropriate for the drivetimes to DC fast chargers to be within 10 minutes of a MUD. However, this should also not be a requirement per se. For DC fast charging stations, we propose the CEC give more weight to charging stations that are within a 10-minute drive time than those that are farther away. Again, if CEC staff would prefer to have a clear delineation, an alternative would be to require the site be within a 10-minute drive time and give more weight to sites that are closer.

We believe the key to siting offsite charging for MUDs is to balance how close the charging station can be to the residences they will serve, with the type of charging that is being proposed, and the amenities and public transit options that are located around the charging station. Therefore, we also recommend including some weight for charging stations (both Level 2 and DC fast charging) that are located near amenities and public transit options. We believe these less prescriptive siting requirements will allow the CEC staff to see a wider range of proposals that can balance the diverse needs of the communities they will serve.

Network Capabilities for Level 1 and Level 2 Chargers

CalETC recommends defining "network capable." There are many ways to accomplish network capability (e.g., common interface, multi-chip router, or chipset), so there likely needs to be some input from technical experts on how best to accomplish network capability that effectively futureproofs and does not add unnecessary costs. We also recommend that the network capability requirement only apply to projects seeking to install Level 2 chargers. Level 1 chargers are not typically network capable, except, for example, smart outlets like Orange Charger. Additionally, networking is not the only type of load management. Some of the benefits of networking can be accomplished by using solar and/or stationary storage, a centralized single-networked controller, or an automated load management system that can throttle power up and down based on grid signals. Automated load management systems can also reduce the need for costly electrical upgrades, while still providing charging for a large number of EVs. In addition to a definition for "network capable," CalETC recommends allowing additional forms of load management to qualify as the network capable requirement for projects proposing to use Level 1 chargers.

CalETC supports the requirement that Level 2 and DC fast charging installations be network capable and note this is consistent with CEC policy in the recently adopted AB 2127 report. We believe that preserving the option of non-networked chargers is important to provide flexibility for project design and affordability. Installing charging infrastructure in existing buildings can be very costly, especially when done as a stand-alone project and not part of an alteration or addition.[1] We support the draft concepts' flexibility regarding networking so that projects can be proposed with or without networking, but still futureproof should networking be desired in the future.

Data Reporting

We note that any non-networked chargers would be unable to comply with the data reporting requirements in the Draft Concepts. When a project installs non-networked chargers, we recommend that the CEC require the project include a load management strategy and/or a set of reporting requirements that can be provided by the non-networked charging system.

For networked chargers, CalETC further recommends that three of the data collection requirements be made optional. The three data fields that should be optional are 1) the type of vehicle that charged; 2) energy delivered back to the grid or facility; and 3) the number of unique vehicles and frequency of "repeat vehicles." These three data fields are not collected by some charging network

[1] CalETC, in partnership with Tesla and ChargePoint, conducted a cost analysis in 2019 on non-residential infrastructure upgrades and found that when included in the cost of an addition or alternation, adding charging infrastructure at a small building costs about $1,000-1,200 per parking space, but adding it as a stand-alone project would cost $5,500 per parking space, a savings of approximately $4,000 per parking space. These costs were similar for medium sized buildings. For large buildings the savings were less but still about $1,800 per parking space. See *Plug-In Electric Vehicle Infrastructure Cost Analysis Report for CALGreen Nonresidential Update*, available at https://caletc.aodesignsolutions.com/assets/files/CALGreen-2019-Supplement-Cost-Analysis-Final-1.pdf.

providers so would be impossible to report. Therefore, we recommend making these data fields optional under the reporting requirement.

Eligibility List for the Rural Areas

CalETC recommends revising the eligibility list to ensure that all rural areas of the state are eligible, even those that are within a county that has a large population center. The eligibility list for rural areas excludes Los Angeles and San Diego Counties, but there are rural locations within those counties that could qualify. Additionally, there are some big cities within San Bernardino, Riverside, and Ventura Counties that are likely too heavily populated to qualify. The U.S. Census Bureau defines "rural" as any population, housing, or territory that is not in an urban area.[2] Their definition of "urban area" includes both "urbanized areas," which have a population of 50,000 or more and "urban clusters," which have a population of at least 2,500 and less than 50,000.[3] The U.S. Census Bureau's map of urbanized areas and urban clusters is a useful guide to define eligibility for rural areas.[4] We recommend clarifying the eligibility list for rural areas to ensure all rural areas are eligible.

We greatly appreciate the opportunity to provide feedback on these Draft Concepts and thank you for consideration of our comments. Do not hesitate to contact me at Kristian@caletc.com if you have any questions.

Best regards,

Kristian Corby, Deputy Executive Director

[2] See *How does the Census Bureau Define Rural*, available at https://mtgis-portal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=49cd4bc9c8eb444ab51218c1d5001ef6.
[3] *Ibid*; also see *A Century of Delineating a Changing Landscape: The Census Bureau's Urban and Rural Classification, 1910 To 2010*, available at https://www2.census.gov/geo/pdfs/reference/ua/Century_of_Defining_Urban.pdf.
[4] Urbanized Areas and Urban Clusters: 2010, available at https://www.census.gov/library/visualizations/2010/geo/ua2010_uas_and_ucs_map.html.