SWTCH Comments on Community Charging in Urban Areas

Additional submitted attachment is included below.

April 5, 2024

California Energy Commission
715 P Street
Sacramento, CA 95814

Re: Docket No. 20-TRAN-04 - Comments on Community Charging in Urban Areas
Pre-Solicitation Workshop

Dear CEC Fuels and Transportation Division:

SWTCH respectfully submits these comments on the Community Charging in Urban Areas
Pre-Solicitation Workshop hosted on March 7, 2024 in the above-named docket. SWTCH
supports California's efforts to increase public EV charging infrastructure in disadvantaged
and low-income communities in urban areas. We offer support for specific program elements
and suggestions for modifications that will enable more streamlined implementation of these
proposed regulations.

About SWTCH

SWTCH is a leading provider of electric vehicle (EV) charging and energy management
solutions for multifamily, commercial, and workplace properties across North America. Our
end-to-end solution optimizes EV charging usage and manages load to benefit drivers,
property owners, and the grid. SWTCH has deployed more than 10,000 chargers across
North America, with a strong focus on equitable access. SWTCH's charging management
platform is built upon a foundation of open communication standards and interoperability to
prevent stranded assets and to ensure future flexibility, scalability, and innovation.

Comments

1. **SWTCH supports the CEC's focus on disadvantaged and low-income
   communities in urban areas and selecting charging sites that are open to the
   public, but encourages modifying required hours of public availability.** SWTCH
   appreciates the CEC's focus on communities disproportionately burdened by multiple
   sources of pollution in densely populated and low-income areas. SWTCH prides itself
   on a strong track record of deploying cost-effective EV managed charging solutions
   in these communities. These experiences have informed SWTCH's approach to new
   technologies and services, such as dynamic load management solutions that save
   money on infrastructure costs, 24/7/365 customer support in multiple languages, and
   proptech integrations that enable resident scheduling of EV charging sessions using
   the property management company's customer-facing app.

   Industry experience has shown it can be a challenge to identify suitable sites for
   public charging that are available, readily accessible to the public, and have willing
   site hosts. To increase participation and enable a broader universe of eligible
   locations to meet CEC's program goals, SWTCH encourages flexibility in allowing a
   site's chargers to be publicly available for less than the proposed 18 hours per day.
   CEC can still favor sites with more hours of public availability by scoring such sites

more highly. Such an approach would incentivize greater hours of public availability without needlessly ruling out other sites that may offer 12 or 14 hours of public availability and be otherwise well suited to meet the CEC's goals for this program .

2. **SWTCH supports a requirement for 6.2 kW Level 2 minimum output per port as well as eligible expenses named during the March 7 workshop.** Although the CEC is not proposing to lower the required power level for eligible Level 2 chargers from the current minimum of 6.2 kW, public inquiry along those lines was discussed during the March 7 workshop. SWTCH supports maintaining the existing requirement for higher-powered Level 2 charging to enable software-based intelligent EV charging, often referred to as automated load management (ALM). ALM is a key tool to provide cost-effective charging for the driver while enabling more optimal usage of the electrical system both at the property level and — when deployed at scale — on the grid. The more power a charger can deliver, the more flexibility the driver has to optimize charging via an ALM-based approach and realize the associated cost savings and benefits. Additionally, SWTCH appreciates that the CEC will consider Operations and Maintenance (O&M) plans and execution, service level agreements, and charge point operator software as eligible expenses.

3. **SWTCH supports CEC requirements such as Open Charge Point Protocol (OCPP) and ISO 15118 ready.** SWTCH is one of a select number of charging companies that is OCPP 2.0.1 certified with ISO 15118 ready capabilities. As the CEC points out in the February 2024 statewide EV Charging Infrastructure Assessment, "OCPP is commonly used for communication between the charger and network software, and ISO 15118 is used for communication between the charger and the vehicle. Because a vehicle and charger are present in every charging session, standardizing communication at this 'front' end with these protocols guarantees a consistent way to translate information from a wide variety of sources in the 'back' end."[1] Requiring these standards is essential for on-site or local dynamic load management, participation in utility load management programs, and unlocking new technologies such as vehicle-grid-integration.

4. **SWTCH recommends a lower charger port minimum to increase participation, especially for multifamily buildings.** A lower minimum number of charger ports will allow for more building types to apply for project funds. This is especially beneficial to multifamily properties, which are often located in disadvantaged or low-income areas. Given that 80% of EV charging occurs at home[2] and multifamily affordable housing is less likely to offer EV charging to residents, this is a critical sector to continue to invest in. Lowering the minimum port count to 20 per application will increase opportunities for multifamily building participation in this program.

Because the CEC is planning to require chargers to be OCPP-compliant, it will make it more feasible and cost-effective for properties that initially install fewer chargers to scale over time. OCPP will enable such properties to manage both their initial set of

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[1] California Energy Commission. *Assembly Bill 2127 Second Electric Vehicle Charging Infrastructure Assessment Commission Report*, February 2024.

[2] National Renewable Energy Report. *Incorporating Residential Smart Electric Vehicle Charging in Home Energy Management Systems,* 2021.
https://www.nrel.gov/docs/fy21osti/78540.pdf

chargers and future chargers in an integrated manner and with a unified network management platform.

5. **SWTCH recommends a sliding scale match share for for-profit applicants based on company size.** SWTCH appreciates the CEC's workshop question around whether the match share minimum of 20% of total project cost is reasonable. SWTCH agrees with a workshop attendee'spublic comment that the CEC should allow for a sliding scale match based on a for-profit applicant's company size. Company size can be based on annual revenue with ranges. The smaller the company, the lower the threshold the CEC should set for a match share. An example matrix is shown below:

Company Size (based on Total Annual Revenue)	Match Share (from Private Entities)
$0 - $25 million	10%
$25 - $50 million	15%
$50 - $100 million	20%
Greater than $100 million	25%

In Closing

SWTCH appreciates the steps that the CEC is taking to improve EV infrastructure and the charging experience across the state. We look forward to working with stakeholders to advance best-in-class EV charging infrastructure deployment and operational practices, and appreciate the opportunity to comment on these matters. If you have questions or if I can provide more information, please contact me at ben.brint@swtchenergy.com or 415.535.8444.

Respectfully,

Ben Brint
Policy Manager, Western U.S.