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GoPowerEV Comments for EV Chargers at CA Military Bases

Low-power (20Amp) smart Level 2 EV chargers, without the requirement to have permanently attached charging cords, must be included in the list of eligible equipment for the Military EV Chargers Funding Program for multi-family residential parking facilities on military bases. This would bring the Military EV Chargers Program into alignment with the CA Department of Housing and Community Development Final Express Terms Regarding the 2022 California Green Building Standards Code mandatory measures to install low-power smart Level 2 charging in multi-family residential parking facilities.

Unfortunately, the proponents of high powered Level 2 charging for multi-family residential parking facilities have their minds frozen in the ICE age. During the age of the Internal Combustion Engine (ICE age), it was immeasurably inconvenient to take a car to a gas station on a daily basis; instead, drivers would take their ICE vehicle to the gas station once every 7-10 days and fill up the tank.

The EV age liberates drivers by encouraging them to come home, plug in at their own space, and recharge their vehicles on a daily basis (or every other day). The inconvenience of finding a refueling site and waiting in line is over! And this solution is easier for the electric grid as well, as demand spikes are lower.

Additional submitted attachment is included below.

GoPowerEV

<https://gopowerev.com/>

December 19, 2023

Miguel Martinez
Utility SIG Program Manager
GoPowerEV Inc.
2935 Alexis Dr.
Palo Alto, CA

Mr. Wendell Krell
Energy Commission Specialist II
California Energy Commission
1516 9th Street
Sacramento, CA 95814

Re: Docket Number 23-TRAN-04-2024 – Military EV Chargers

Dear Mr. Krell,

We represent GoPowerEV, a provider of cost-effective EV charging solutions designed to facilitate the transition to electric mobility, especially within multi-family residential settings. Our mission aligns with California's broader environmental goals, and we write to propose specific adjustments to accelerate the widespread adoption of EV charging stations.

Low-power (20Amp) smart Level 2 EV chargers, without the requirement to have permanently attached charging cords, must be included in the list of eligible equipment for the Military EV Chargers Funding Program for multi-family residential parking facilities on military bases. This would bring the Military EV Chargers Program into alignment with the CA Department of Housing and Community Development Final Express Terms Regarding the 2022 California Green Building Standards Code mandatory measures to install low-power smart Level 2 charging in multi-family residential parking facilities.

Since the purpose of the Military EV Chargers Program is aimed at increasing the number of electric vehicle (EV) chargers installed at military bases or related facilities and available for use by non-tactical government and privately owned vehicles with authorized access to military bases, installation of low-power smart Level 2 EV chargers is a cost-effective installation to convert multi-family residential parking spaces into powered EV charging spaces – providing equity and ubiquity for military personnel and their families.

Low-power smart Level 2 EV chargers, without the requirement to have permanently attached charging cords, also increases up-time, decreases maintenance costs and provides military personnel and their families with the convenience of EV charging in their own powered spaces.

While high-powered Level 2 chargers are great for long distance driving, they don't address this program's need to maximize the installation of Level 2 chargers to provide normal equity and ubiquity for military personnel and their families. According to research conducted by San Mateo County's Peninsula Clean Energy, "94%+ of drivers' actual driving needs are satisfied with 1.65 kW charging." Multi-family residents utilizing low-power smart Level 2 charging can get 150 miles of range per at-home, overnight charging session.

During the pre-solicitation workshop, there was strong vocalization of support for high powered Level 2 charging. They cited the "convenience" of fast charging.

Unfortunately, the proponents of high powered Level 2 charging for multi-family residential parking facilities have their minds frozen in the ICE age. During the age of the Internal Combustion Engine (ICE age), it was immeasurably inconvenient to take a car to a gas station on a daily basis; instead, drivers would take their ICE vehicle to the gas station once every 7-10 days and fill up the tank.

The EV age liberates drivers by encouraging them to come home, plug in at their own space, and recharge their vehicles on a daily basis (or every other day). The inconvenience of finding a refueling site and waiting in line is over! And this solution is easier for the electric grid as well, as demand spikes are lower.

A smart outlet is an advanced version of a standard electrical outlet that provides enhanced functionality and connectivity. The GoPowerEV PowerPort3 is a Smart Outlet certified by UL for use as Electric Vehicle Charging Infrastructure. Smart outlets can serve as a cost-effective and flexible solution for EV charging. Subsidy programs requiring EV chargers with integral cords inadvertently increases costs and limits the flexibility for users and installers. Integral cords can pose challenges in terms of compatibility with various EV models, maintenance, and potential need for replacements. On the other hand, smart outlets allow EV owners to use their own charging cords, which can be replaced or upgraded easily, facilitating a more user-friendly and adaptable EV charging infrastructure, including being used for charging e-mobility such as scooters and bicycles. Hence, revising subsidy programs to include smart outlets without integral cords can foster a more inclusive, economical, and adaptable approach to accelerating EV adoption and infrastructure deployment.

Low income military personnel and their families residing in multi-family properties can barely afford e-mobility transportation and the purchase of used EVs. As such, it makes sense for the Military EV Chargers Funding Program to adopt measures to encourage the installation of low power smart Level 2 ports at multi-family residential parking facilities on military bases.

Another issue to keep in mind is the income level of military personnel and the economic level of their families. The expendable income level of military families is tight. Many military families will prefer used EVs, not the new EVs with the higher charging rate. Ubiquitous and equitable installation of low power smart Level 2 ports is required at multi-family parking properties on military bases.

Endorsements

As a mission-driven clean energy implementation firm, for over 25 years *Energy Solutions* continues to focus on creating large-scale environmental impacts by providing cost-effective, market-based solutions. With the transportation sector contributing the largest portion of greenhouse gas emissions in the United States, both the opportunity for electrification and the challenge of doing so quickly, equitably, and in a manner compatible with the needs of the electric grid are substantial.

Energy Solutions endorses the GoPowerEV solution for ubiquity and equity of EV charging in multi-family parking facilities:

The majority of EV charging takes place at home. It will be imperative to deploy as much infrastructure as possible that can provide at-home charging sufficient to support a daily commute – less than 40 miles per day for most Californians – while not overloading the grid. With its ability to provide low-power smart Level 2 charging to EVs and electric micromobility technologies, GoPowerEV is an ideal solution to support that vision of universal EV charging access.

Peninsula Clean Energy, a Community Choice Aggregation (CCA) program, a public agency, serving San Mateo County with renewable energy, at lower rates, and reinvesting in community decarbonization programs, stated:

GoPowerEV has an innovative and cost-effective charging solution that aligns with *Peninsula Clean Energy's* right-sizing approach to EV charging. GoPowerEV's software helps EV owners charge their car during hours with cheaper and cleaner electricity. Their approach also helps Peninsula Clean Energy in our mission to achieve 100% renewable energy on an hourly basis.

All grants and incentives encouraging EV charging stations in multi-family parking facilities on military bases should support the installation of low-power smart Level 2 20amp 208/240v (3.8kW) ports, without the requirement to have charging cords.

Sincerely,



Miguel Martinez

Utility SIG Program Manager

Attachment:

GPEV_MultiFamilySolution

The most cost-effective, convenient, and scalable hybrid L1 / L2

Charging for Market-Rate and
Affordable Multi-Family housing

Promote Equitable Access to EV Charging

Subsidy programs should support smart, power-managed, 20 Amp 208/240v (3.8kW) charging receptacles because they are ideal for multi-family.

Economically Priced For Property Owners

Equitable access helps achieve sustainability mandates

Much lower installation time and cost means every EV owner can get their own charging port in their own parking space. Helps meet Justice40 initiatives.

5X

**5x the
number
of stations
for a given
budget**

Lower Cost to Install

At a full installation cost of \$2500 to \$3500 per space, they are 50% to 80% cheaper to install.

High Up-time

Receptacles are more reliable. No screen or cord to fail.

Convenient

Residents charge in their own spaces, no conflicts. Leave car plugged in when at home.

Low Maintenance

Our unique design allows for easy replacement without an electrician.

Turnkey Solution

Universal

Independent of the charging adaptor (NACS, CCS-J1772, ChaDemo), receptacles can be used for charging all forms of eMobility.



Sustainability

Better for the Grid

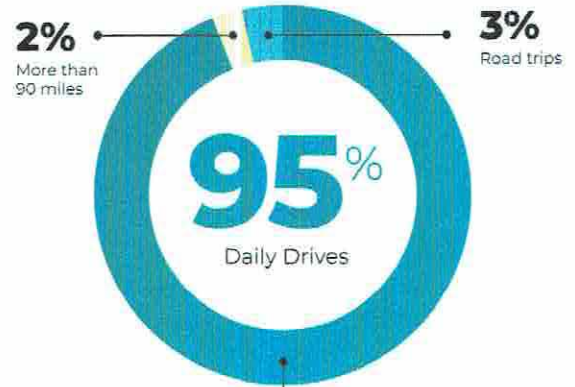
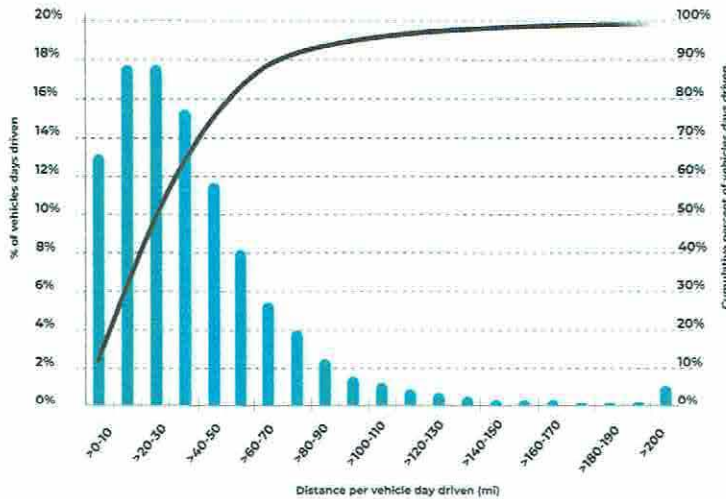
Smart, power-managed receptacles can time-shift demand, helping to shed load during peak times. Much lower peaks than super-charging.



Why is Low-Power (20A) L2 perfect for multi-family?

Lower installation cost means ubiquitous, convenient, in-your-space availability, so residents can leave their car plugged in at home where charging electricity rates are lowest.

Residents can get 150 miles of range in each at-home, overnight charging session.



95% of daily drives are less than 90 miles

Of the drives over 90 miles, most of the time it is a road-trip, and it will be necessary to use en-route or destination charging anyway.

Aligning subsidies and building codes. Maximize access to charging for multi-family residents

California building standards are requiring at least 40% of parking spaces have access to Low-Power L2 (3.8kW) charging receptacles. And agencies are providing subsidies to help multi-family residents



Provides \$2000 subsidy for each smart L1 or L2 outlet

"This is an exciting technology that has great potential to fill a current gap in the market."

