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EVCA Comments on CA's Deployment Plan for the NEVI Program

Additional submitted attachment is included below.

Electric Vehicle Charging Association
INNOVATION FOR CLEAN MOBILITY

June 24, 2022

Ms. Barby Valentine
Mr. Tony Dang
Director's Office of Sustainability
California Department of Transportation
1120 N Street
Sacramento, CA 95814

RE: EVCA Comments on California's Deployment Plan for the National Electric Vehicle Infrastructure Program

Dear Ms. Valentine and Mr. Dang,

The Electric Vehicle Charging Association (EVCA) is a not-for-profit trade organization of sixteen leading EV charging industry member companies and two zero-emission autonomous fleet operators. EVCA's mission is to advance the goal of a clean transportation system in which the market forces of innovation, competition, and consumer choice drive the expeditious and efficient adoption of EVs and deployment of EV charging infrastructure.

EVCA thanks the California Energy Commission (CEC) and the Department of Transportation (Caltrans) for convening sub-working groups to inform the state's Deployment Plan for the National Electric Vehicle Infrastructure (NEVI) Program as required by the Infrastructure Investment and Jobs Act (IIJA). We acknowledge the time commitment required to produce a comprehensive draft Deployment Plan.

We have reviewed the draft Deployment Plan provided and offer the following feedback in response to the draft below.

1. We are supportive of California's Deployment Plan vision to build out EV charging stations in an equitable and efficient manner and are supportive of the goals of seamless travel and equity. We acknowledge the importance of reliability but would encourage further conversation with stakeholders to determine the specific reporting requirements needed.

2. We understand that the requirement for EVITP is coming from the federal government, but we appreciate Caltrans and CEC acknowledging the challenges that come with EVITP. We echo those same concerns and support CA looking at other options to mitigate the current challenges with EVITP certification.

3. We support maintaining the 150 kW DCFC minimum and encourage the Caltrans to continue allowing higher DCFC power levels to be optional rather than mandated. By specifying DCFC power levels higher than 150 kW, Caltrans risks overbuilding infrastructure when power levels higher than 150 kW are not needed (and thus passing more costs on to drivers), but it also risks locking out any number of charging companies from participating in its program, reducing competition for charging solutions offered to drivers. Requiring anything higher than 150 kW could also lock out potential sites that do not have the capacity to go higher (i.e., rural areas), or otherwise significantly increase distribution system upgrade costs. This requirement would also cause constraints on the electrical grid, increase upgrade costs, and inadvertently slow deployment rather than accelerate it. We also would like Caltrans to consider rural and grid constrained sites who may struggle to get adequate power to meet the site requirements. The state should be looking to use resilient distributed energy resources to the extent feasible, and we encourage Caltrans and the Energy Commission to do a cost benefit analysis of varying DCFC power levels to fully understand trade-offs to drivers before mandating higher power levels.

4. We support Caltrans' and the CEC's intention to allocate 50 percent of the NEVI funds towards projects in low-income and disadvantaged communities. FHWA's guidance currently requires that 40 percent of "benefits" from the IIJA funds benefit underserved communities; we strongly support this as an important first step toward ensuring these communities are not left behind in the transition to EVs. We support California going beyond "Justice 40" by allocating 50 percent of its IIJA funds to underserved communities directly. This will more firmly and concretely deliver economic investment and GHG reductions to these communities, whereas sometimes quantifying "benefits" can be more elusive.

5. The draft Deployment Plan states the CEC is currently evaluating how data is collected, stored, and transmitted to the CEC; what specific data can or should be required; and whether or how to aggregate and publish this data or resultant analyses. We respectfully request the CEC to involve electric vehicle service providers in these conversations to determine what data is actually needed.

6. We are supportive of the acknowledgment of cybersecurity. Understanding that there will be further guidance from the Joint Office, we recommend that public charging infrastructure should adopt, including the following:

   "Boot Security." Boot security uses embedded manufacturer approved and authenticated hardware devices to authenticate operating system software when an EV charger is "booted" up. If the operating system at the boot stage is not authenticated, the charger will stop the malicious operating system from loading or making changes to the charger.

   Secure "over the air updates." Secure methods to update software on deployed chargers should be available such as "over the air updates" or updates that can be issued remotely. When the software components on an EV charger are updated, there should be

protections in place to authenticate the software update before the update is accepted and implemented. This mitigates the risk of malicious software being loaded onto a device.
Secure communication. EV chargers communicate sensitive data to a central system on the cloud for their operation and to offer charging services for the EV drivers. The link between the chargers and this central system must be sufficiently secured to ensure authenticity, confidentiality, and integrity of the data exchanged. This mitigates the risk of man in the middle attack.

Secure Customer Information. EV chargers may store sensitive data like, for example, personally identifiable information or payment information. This sensitive data should be protected and there are a variety of means to do that including, but not limited to, encryption, role-based access, and limiting the amount of such information locally stored on an EV charger.

We would also like to offer the following Program Design Recommendations for your consideration.

1. **Publish a transparent, quantitative scoring rubric** to make clear to charging companies what Caltrans' project priorities are. This provides critical predictability to charging companies regarding how best to design EV charging projects.

2. **Set predictable, pre-scheduled, and pre-published funding windows** to allow charging companies to adequately prepare competitive projects. Finding the right project partners, including site hosts, can take significant preparation work. By giving applicants a more predictable schedule for when program funds become available, they can plan their projects and applications accordingly by ensuring they have staff ready to design the project, write applications, and secure 20 percent of project funds from private or local sources to comply with cost share requirements.

3. **Release funds through multiple rounds** (by corridor and by year) to create opportunity for administrators to adjust programmatic details based on learnings from previous rounds. The EV charging market is evolving rapidly; so, should program guidelines and solicitation designs on an annual basis. Allowing companies to bid for the entire 5 years of the funding program would lock out vendors, especially newer ones, from competitively participating in this program, creating negative market impacts. Such a design advantages more well-established, larger companies, when this has been a rapidly evolving market with new companies, business models, and technologies being developed every year.

4. **Allow companies to build at risk** to build out charging along highway corridors as quickly as possible. Rather than waiting for grants to be awarded, charging network operators should be allowed to build at their own financial risk between the time the program starts accepting applications to when the grant is awarded. If an application receives an award, those expenses should be reimbursable. This will fast-track installations and help spur market growth for California.

5. To foster resiliency and guarantee a continuity of charge at California's NEVI locations, each site should have one charging port that is tied to a **distributed energy resource (DER) or energy storage system**. FHWA's February guidance included DERs and energy storage as an option, but that is not reflected in this draft plan.

6. **Allow Level 2 charging to be deployed in tandem with DCFC at NEVI sites.** This will provide redundancy, meet the needs of different drivers, create flexibility for the charging port provisions after the CCS requirement has been met, and help alleviate congestion at NEVI sites. During the June 14th Joint Workshop, staff was receptive to this concept, and expressed a potential interest in incorporating it in the final plan.

Thank you for your consideration of this feedback.

Sincerely,

Reed Addis
Governmental Affairs
Electric Vehicle Charging Association