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Comments regarding the Draft California NEVI Plan

Additional submitted attachment is included below.

Center for Sustainable Energy
3980 Sherman Street, Suite 170
San Diego, CA 92110
Tel 858-244-1177
Fax 858-244-1178
EnergyCenter.org

June 28, 2022

California Energy Commission
Docket Unit, MS-4
Re: Docket No. 22-EVI-03
715 P Street
Sacramento, CA 95814

Re: Docket No. 22-EVI-03 - Comments of the Center for Sustainable Energy® regarding the Draft California Deployment Plan for the National Electric Vehicle Infrastructure (NEVI) Program

The Center for Sustainable Energy® (CSE) appreciates the opportunity to provide comments in response to the Draft California Deployment Plan for the NEVI Program (Draft NEVI Plan). CSE commends the efforts of the California Department of Transportation (Caltrans) and the California Energy Commission (CEC) to develop an outline of a comprehensive and holistic strategy for deploying electric vehicle (EV) infrastructure. CSE is excited to contribute to the development and implementation of this strategy.

CSE is a 25-year-old national nonprofit driven by one simple mission – decarbonize. We provide program administration, technical assistance, and policy advisement, and serve as a trusted resource helping government agencies implement successful clean energy and transportation programs. CSE provides these comments based on our experience designing, implementing and evaluating statewide incentive programs in California, Connecticut, Massachusetts, New Jersey, New York, Oregon and Vermont, which collectively translates to over $1 billion worth of program value under management. Additionally, CSE was involved in working with Federal policymakers to inform the development of the Infrastructure Investment and Jobs Act (IIJA) and the NEVI Program.

CSE highlights the need to ensure that NEVI-funded EV infrastructure projects are deployed in an efficient, equitable, and strategic manner that complements existing initiatives. While CSE supports the EV infrastructure deployment processes proposed in the Draft NEVI Plan, more detailed data collection and precise analytical approaches are necessary to ensure progress toward State goals. Specifically, CSE offers the following recommendations:

1. Institute robust data collection requirements that harmonize State and Federal initiatives and comprehensively capture the information needed to inform decision-making.
2. Incorporate diverse sets of metrics to effectively rank segments and ensure equitable EV infrastructure deployment.
3. Utilize analytical tools that overlay variables, map results, and integrate live data.
4. Launch a platform that enables public stakeholders to interact with planning variables.

CSE's responses are discussed in detail below.

1. Institute robust data collection requirements that harmonize State and Federal initiatives and comprehensively capture the information needed to inform decision-making.

CSE appreciates the efforts of Caltrans and the CEC to establish robust data collection, storage, and transmission requirements to inform program evaluation. CSE commends the efforts to build upon previous data collection requirements, including those under the California Electric Vehicle Infrastructure Project (CALeVIP), which is implemented by CSE on behalf of the CEC. CSE also supports aligning requirements across future State and Federal efforts, including future CEC funding agreements with site hosts or Electric Vehicle Service Providers (EVSPs).

CSE encourages Caltrans and the CEC to detail specific data collection requirements within the Draft NEVI Plan. Specifically, CSE recommends that the final NEVI Plan incorporate the utilization metrics required under CALeVIP. These data collection requirements stipulate that grant recipients must: (1) Submit two to five years of usage data for Level 2 (L2) chargers and Direct Current Fast Chargers (DCFC), respectively; (2) Submit data in increments of not less than one month and not more than one year; and (3) Enable the CEC and project implementers to directly acquire session data from the EVSP.[1] CSE also recommends that EVSPs be required to report reliability data through either application programming interfaces (APIs) or periodic reports that are submitted in increments of not less than one month and not more than one year, as is the case for CALeVIP. CSE suggests that a quarterly reporting cadence may be appropriate. Lastly, CSE recommends requiring grant recipients to authorize the CEC or project implementers to directly acquire utilization and network data from the EVSP, as is the case for CALeVIP. This will streamline data collection and evaluation.

Additionally, CSE recommends that the final NEVI Plan incorporate the metrics outlined in the Federal Highway Administration's (FHWA) Notice of Proposed Rulemaking (NPRM) on minimum standards and requirements for the NEVI Program.[2] These requirements include quarterly submissions detailing data on charger location, charging sessions, energy dispensed, peak session power, uptime, electricity costs, maintenance and repair costs, utility interconnection and upgrade costs, property acquisition costs, and acquisition and installation costs for charging equipment and distributed energy resources (DERs). The NPRM also outlines annual reporting requirements, which include details regarding the entity operating, maintaining, and installing the charger and identification of whether this entity participates in specified business certification programs. Lastly, the NPRM requires states to prepare community engagement outcomes reports that detail community engagement by type, date, number of attendees, communities represented, and how states sought to address the outcomes from engagement.

[1] CALeVIP, Building EV Infrastructure. https://calevip.org/

[2] Federal Register, National Electric Vehicle Infrastructure Formula Program. https://www.federalregister.gov/documents/2022/06/22/2022-12704/national-electric-vehicle-infrastructure-formula-program

2. Incorporate diverse sets of metrics to effectively rank segments and ensure equitable EV infrastructure deployment.

CSE supports the Draft NEVI Plan's proposed ranking factors for prioritizing segments, including corridor type, equity, traffic and charging demand, existing and planned DCFC, and permit streamlining. However, CSE encourages Caltrans and the CEC to provide additional details regarding the ranking process. For example, the Draft NEVI Plan does not discuss how the proposed factors will be weighted or how the relative importance of each factor will influence the final determination of where to site chargers. CSE also notes that different regions may have different priorities with respect to deploying EV infrastructure. For example, rural communities may experience less charging demand but may serve as important locations for ensuring coverage and connectivity across the length of the charger network. Addressing these uncertainties can enhance forecasting efforts and ensure the timely disbursement of funds.

CSE also offers recommendations on the specific ranking factors described within the Draft NEVI Plan. With respect to traffic and charging demand, CSE notes that existing travel may not be a suitable indicator of future charging needs, particularly in the near-term. CSE encourages agencies to consider factors beyond solely miles driven. Rather, CSE encourages forecasting charging demand based on the existing distribution of EV incentives or forecasted EV fleet sizes. With respect to the prevalence of existing or planned DCFC, CSE supports the efforts of Caltrans and the CEC to prevent duplication and direct public funding towards those areas that are not being addressed by the private sector, including rural corridors and areas with limited access to electricity. CSE notes that these regions may not be situated along existing Alternative Fuel Corridors (AFCs) or Interstate Highways and therefore may not be highly prioritized based on the ranking factors identified in the Draft NEVI Plan. CSE reiterates the importance of a flexible planning approach that can rank segments based on unique regional needs or considerations. CSE also highlights the need to assess electrical grid capacity within the segment prioritization process, ideally by prioritizing EV infrastructure deployment near substations. Additionally, CSE emphasizes the benefits of coupling EV infrastructure with solar photovoltaic and battery storage systems, which can utilize renewable electricity, minimize demand charges, enhance resiliency, and prevent costly grid upgrades.

With respect to the equity-focused ranking factors, CSE supports the proposal from Caltrans and the CEC to prioritize at least 50 percent of NEVI funds for disadvantaged and low-income communities identified by CalEnviroScreen 4.0,[3] while also complying with the requirement under the Justice40 Initiative to ensure that at least 40 percent of NEVI funds are directed towards disadvantaged communities identified by the U.S. Department of Transportation's (DOT) EV Charging Justice40 Map Tool.[4] CSE

[3] California Office of Environmental Health Hazard Assessment, CalEnviroScreen.
[4] Argonne National Laboratory, Electric Vehicle Charging Considerations. https://www.anl.gov/es/electric-vehicle-charging-equity-considerations

encourages Caltrans and the CEC to coordinate with Federal counterparts to more precisely define and identify communities that should be prioritized for EV infrastructure deployment. CSE also acknowledges and appreciates the efforts of Caltrans and the CEC to quantify equity benefits by assessing air quality improvement, greenhouse gas (GHG) emissions reductions, and petroleum displacement. CSE supports efforts to overlay these benefits on maps of EV infrastructure projects, as highlighted by the CEC during the *IEPR Commissioner Workshop on Benefits from the Clean Transportation Program* held on July 31, 2021.[5]

CSE encourages Caltrans and the CEC to also evaluate how EV infrastructure outside of disadvantaged and low-income communities can provide benefits to the residents of these communities, particularly for those who do not have access to home charging and for rideshare drivers who service these areas but may reside in nearby areas. For example, the Plug-in San Diego initiative, administered by the San Diego Association of Governments (SANDAG) with assistance from CSE, developed an EV infrastructure map with an overlay option to identify Benefit Accruing Areas,[6] defined as, "Areas with high proportion of automobile-based work trips originating from Disadvantaged Communities."[7] These areas, which can include workplaces, retail locations, and job centers, can present an alternative way to track equity benefits that would not otherwise be captured. CSE encourages Caltrans and the CEC to consider integrating this type of travel pattern analysis to better understand charging needs in California, especially in disadvantaged and low-income communities. CSE notes that similar work is already being conducted by the CEC as part of its efforts to update the Senate Bill (SB) 1000 EV Charging Infrastructure Deployment Assessment.

Lastly, CSE highlights additional ranking factors whose inclusion in the segment prioritization process would help ensure efficient and equitable EV infrastructure deployment. These factors include existing charger deployment by type and power level, area median income, regional population, regional fleet share and EV adoption levels, distribution of amenities and retail areas, distribution of housing (including single-family, multi-family, and affordable housing units), traffic considerations (including vehicle miles traveled through freeway and non-freeway travel), existing grid capacity (including proximity to electrical substations), land use characteristics (including whether the area is in an unincorporated territory or military area) and proximity to highways, Federal AFCs, DACs, low-income communities, Tribal nations, rural regions and other key indicators identified through CalEnviroScreen

[5] California Energy Commission, IEPR Commissioner Workshop on Benefits from the Clean Transportation Program.
https://www.energy.ca.gov/event/workshop/2021-07/iepr-commissioner-workshop-benefits-clean-transportation-program

[6] San Diego Association of Governments (SANDAG), Plug-in San Diego Electric Vehicle Charging Stations Map.
https://evcs.sandag.org/

[7] San Diego Association of Governments (SANDAG), Plug-in San Diego Electric Vehicle Charging Stations Map Help.
https://evcs.sandag.org/help.html

4.0, the EV Charging Justice40 Map Tool, and other equity initiatives. Incorporating these additional metrics will provide a more holistic assessment of EV infrastructure needs in California.

3. Utilize analytical tools that overlay variables, map results, and integrate live data.

CSE recommends that Caltrans and the CEC utilize analytical tools to expedite and enhance EV infrastructure planning. Specifically, tools and technology systems can be used to dynamically generate geographic information system (GIS) overlays that integrate multiple definitions and ranking factors onto one map. The tools should be able to easily integrate utility data layers from grid operators to maximize the use of funds by limiting the number of upgrades required. The technology can then overlay this map over the existing environment and auto-populate the selected region with EV infrastructure sites that meet specified goals. This process can enable decisionmakers to identify regions that simultaneously satisfy all of the designated prioritization criteria, instantly compare different planning scenarios, and ensure that benefits are directed toward disadvantaged and low-income communities.

CSE also recommends that these tools and technology systems utilize the most up-to-date data available to perform planning in real-time. Integrating data on EV infrastructure utilization, the latest EV charging maps and EV registrations will enhance charger forecasting and siting processes and will generate more detailed charger use profiles that reflect the evolving state of EV technology and public understanding of charging options. This data can subsequently be used to inform the development of the annual State-level EV infrastructure planning efforts and other grant programs.

4. Launch a platform that enables public stakeholders to interact with planning variables.

CSE encourages Caltrans and the CEC to launch an online data visualization platform that enables the public to directly interact with data layers so that they can easily identify locations likely to be prioritized. CSE notes that, during the *Joint Workshop with the California Department of Transportation on the California State EV Infrastructure Deployment Plan* held on June 14, 2022,[8] there were multiple requests for access to the maps shared during the presentation. Developing a public platform will allow individuals to instantaneously access this information, which will in turn enhance transparency and promote public participation in planning efforts. This participation will be especially important for stakeholders from disadvantaged and low-income communities as well as local governments and regional planning agencies.

[8] California Energy Commission, Joint Workshop with the California Department of Transportation on the California State Electric Vehicle Infrastructure Deployment Plan.
https://www.energy.ca.gov/event/workshop/2022-06/joint-workshop-california-department-transportation-california-state

Conclusion

CSE appreciates the opportunity to provide these comments in response to the Draft NEVI Plan. CSE commends the efforts of Caltrans and the CEC in undertaking this comprehensive planning effort and looks forward to continued engagement in supporting California's EV infrastructure deployment initiatives.

Sincerely,

Rachel McMahon
Senior Director, Policy
Center for Sustainable Energy®
3980 Sherman St., Suite 170
San Diego, CA 92110
rachel.mcmahon@energycenter.org