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Comments in Response to California Energy Commission’s Commissioner Workshop on Plug-In Electric Vehicle Charging Infrastructure

Additional submitted attachment is included below.
August 27, 2020

California Energy Commission
Docket Unit
RE: Docket No. 20-IEPR-02
1516 Ninth Street
Sacramento, CA 95814-5512

Comments of Center for Sustainable Energy® in response to California Energy Commission’s Commissioner Workshop on Plug-in Electric Vehicle Charging Infrastructure

The Center for Sustainable Energy® (CSE) is a mission-driven national nonprofit dedicated to decarbonizing the transportation sector and the built environment. As a nonprofit administrator and advisor, CSE has 24 years of experience in program administration, technical assistance, and policy advisement services. CSE has specific expertise in administering rebate programs for electric vehicles (EVs) and EV charging infrastructure and is currently involved in the administration of rebate programs across six states. In California, CSE implements the Clean Vehicle Rebate Project (CVRP) and the California Electric Vehicle Infrastructure Project (CALeVIP).

CSE commends California Energy Commission (Energy Commission) Staff for their strong efforts to develop a concept proposal for a Transportation Electrification Regulatory Policies Act (TERPA). CSE is supportive of the TERPA proposal and its aim to accelerate transportation electrification within California. CSE appreciates the opportunity to provide comments on the proposal and offers the following recommendations:

- Develop a problem statement to clearly identify and outline TERPA’s goals.
- Adopt a set of guiding principles to address key challenges to EV infrastructure deployment.
- Prioritize and promote equity considerations.
- Acknowledge differences across vehicle classes.
- Leverage opportunities in new construction and renovation projects.

I. DEVELOP A PROBLEM STATEMENT TO CLEARLY IDENTIFY AND OUTLINE TERPA’S GOALS.

Overall, CSE strongly supports the development of a proposal, such as TERPA, to facilitate the deployment of EV infrastructure in a cost-effective, timely, and large-scale manner. To provide clear guidance to stakeholders and enable the Energy Commission to develop the most effective market mechanism, CSE suggests that the Energy Commission develop a problem statement to clearly identify and outline the policy goals that TERPA aims to achieve. Specifically, CSE recommends the Energy Commission clarify how the TERPA proposal will align with or replace existing clean transportation initiatives, including those funded through the Energy’s Commission’s Clean Transportation Program, California Air Resources Board (CARB) Clean Transportation Incentives programs, and the investor-owned utilities’ (IOU) transportation electrification programs, which will eventually be governed by the California Public Utilities Commission’s (CPUC’s) Transportation Electrification Framework (TEF). This myriad of programs, rules, and funding sources may create confusion among stakeholders and inadvertently inhibit the State’s efforts to achieve its 2025 and 2030 clean transportation goals. Accordingly, CSE strongly encourages the Energy Commission, in collaboration with CARB and the CPUC, to identify how these various programs may fit into the State’s transportation policy landscape and how TERPA can serve as a unifying force in coordinating interagency activities.

II. ADOPT A SET OF GUIDING PRINCIPLES TO ADDRESS KEY CHALLENGES TO EV INFRASTRUCTURE DEPLOYMENT.

CSE recommends that the Energy Commission identify and adopt a set of guiding principles to address the key challenges preventing the deployment of EV
infrastructure. Specifically, CSE encourages the Energy Commission to consider four principles: cost-effectiveness; cost-transparency; program expediency; and infrastructure utilization and access. Each of these principles is discussed in greater detail below.

First, improving the cost-effectiveness of EV infrastructure while maximizing existing grid resources should be a key priority of TERPA. Utilizing the lowest cost resources, for both upfront capital cost and ongoing maintenance costs, will provide benefits to consumers and manufacturers alike. To this end, CSE encourages the Energy Commission to include within TERPA a Total Cost of Ownership (TCO) model that captures the costs of the site, equipment, and installation, as well as the costs of maintenance and networking for an extended period. This model should also factor in usage. High installation costs at a heavily used site may offer a far better value than low installation costs at a site that is seldom or never used. Additionally, public charging costs must be competitive (i.e., slightly more than charging at home) to incentivize residential charging where possible. In addition, while CSE is generally supportive of the proposed reverse auction mechanism discussed in the Energy Commission’s TERPA presentation, CSE encourages the Energy Commission to provide greater detail regarding how this mechanism would work in practice. Lastly, CSE encourages the Energy Commission to consider performance-based financing solutions based on charger utilization to further promote cost-effective infrastructure solutions.

Second, providing cost-transparency across EV infrastructure programs will further cost-effectiveness goals by providing clear market signals. To date, state-funded EV infrastructure installations have varied across programs. CSE encourages the Energy Commission to identify and analyze the factors behind these cost divergences and address the underlying issues where possible. This will help ensure that incentives are appropriately set to influence consumer behavior and minimize free ridership issues.
While CSE recognizes that infrastructure costs will vary across sites, CSE suggests the Energy Commission consider developing verification measures to ensure that any cost discrepancies across sites are reasonable.

Third, the expedient development and implementation of TERPA is a key prerequisite for its success. According to the Energy Commission’s analysis, California is unlikely to achieve the goal of deploying 250,000 EV charging ports by 2025.¹ Accordingly, CSE encourages the Energy Commission to propose an implementation plan that would fast-track the development of the TERPA framework to ensure that it can adequately address the State’s EV infrastructure needs in an expedient manner. As noted above, discussion of how TERPA aligns with or replaces existing EV infrastructure programs would be a key component of this development plan.

Fourth, greater utilization and enhanced accessibility are key requirements of EV infrastructure deployment that TERPA should seek to address. CSE encourages the Energy Commission to address utilization and accessibility concerns in the initial stages of the TERPA framework, where regional projects are identified and selected. Specifically, CSE recommends that this stage of the framework include an evaluation to ensure that EV infrastructure sites are accessible and likely to be well-utilized by individuals within the region. While charger sites are likely to vary in both accessibility and utilization, CSE suggests that the Energy Commission identify illustrative charging scenarios, which can be used for evaluation purposes.

III. PRIORITIZE AND PROMOTE EQUITY CONSIDERATIONS.

CSE recommends the Energy Commission establish measures within TERPA to provide benefits to equity communities, which are disproportionately harmed by vehicle pollution and have limited capacity to address these challenges. CSE recognizes

and appreciates the Energy Commission’s equity initiatives through the Clean Transportation Program and CALeVIP in particular. CSE encourages the Energy Commission to adopt a similar or even stronger commitment to diversity, equity, and inclusion provisions within TERPA, such as providing dedicated funding, outreach, and technical assistance to priority populations in low-income and disadvantaged communities. Moreover, CSE suggests that the Energy Commission use TERPA to identify new business models that may otherwise provide benefits to priority populations and incentivize the deployment of EV infrastructure at those site types unlikely to be addressed by the private sector.

Without accessible, affordable public charging infrastructure, a strong secondary EV market for priority populations will take much longer to develop. This infrastructure must also be operated and maintained to ensure the benefit to the community to be served, whether by a utility, public agency, or a joint powers authority (JPA). Lastly, CSE encourages the Energy Commission to explore benefits to priority populations that go beyond the availability of incentives and potentially include workforce development initiatives such as educational programs to train workers to install EV infrastructure. These initiatives could complement existing workforce development programs conducted through the Clean Transportation Program.

IV. ACKNOWLEDGE DIFFERENCES ACROSS VEHICLE CLASSES.

CSE encourages the Energy Commission to explore in greater detail how the TERPA proposal could facilitate electrification of both the light-duty and medium- and heavy-duty (MD/HD) vehicle sectors (and other transportation sectors where applicable). CSE recognizes the significant differences between light-duty and MD/HD electrification strategies and encourages the CEC to address these differences. If possible, the Energy Commission should consider identifying opportunities to address both sectors simultaneously through targeted pilot projects, which may result in cost
savings or incremental emissions reductions. There may be examples of such opportunities within previously-developed regional readiness plans and community blueprints, and CSE commends the Energy Commission for incorporating these resources into the proposed TERPA framework.

V. LEVERAGE OPPORTUNITIES IN NEW CONSTRUCTION AND RENOVATION PROJECTS.

CSE encourages the Energy Commission to consider opportunities in new construction and renovation projects through the State’s Green Building Code. For example, many new or refurbished sites are already required to include make-ready infrastructure, which enables EV chargers to be installed without additional electrical upgrades. CSE encourages the Energy Commission to consider adopting similar cost-effective solutions, which prevent more expensive upgrades at a later point in time.

VI. CONCLUSION

CSE appreciates the opportunity to share these recommendations and looks forward to continuing to engage in further discussion and consideration of the TERPA proposal.

Sincerely,

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