

DOCKETED

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**Tesla Comments - Blueprint and Block Grant for MDHD ZEV
Infrastructure Incentive Project**

Additional submitted attachment is included below.



April 16, 2020

California Energy Commission
Re: Docket No: 19-TRAN-02
1516 Ninth Street
Sacramento, CA 95814

RE: Medium and Heavy-Duty Zero Emission Vehicle Infrastructure Deployments Blueprint and Block Grant

Dear Commissioner Monahan and Energy Commission Staff:

Tesla appreciates the opportunity to provide feedback on the draft solicitation concepts for Medium- and Heavy-Duty (MD/HD) Zero Emission Vehicle Infrastructure (ZEV) Deployment Blueprint and Block Grant that were presented by staff during the April 2, 2020 workshop. In November 2019, Tesla submitted comments on the five draft concepts for the MD/HD ZEV and infrastructure funding under the Clean Transportation Program. Tesla appreciates staff's incorporation of some of this previous feedback to help inform the two current draft solicitations.

Heavy-duty electric vehicles (EVs) will have unique charging needs in terms of power level requirements, duration of charging events, and the timing of when the charging occurs when compared to other vehicle classes and use cases, such as medium-duty fleets. Tesla, therefore, focuses its comments on the perspective of the potential charging needs for heavy-duty EVs and how the proposed solicitations under the block grant and blueprint can best support heavy-duty EV needs.

I. Blueprints for MD/HD ZEV Infrastructure Planning

This effort appears similar to the Energy Commission's previous efforts to fund EV-ready community blueprints which were primarily focused on light-duty vehicles. Tesla supports opening a competitive solicitation to garner interest in transitioning to MD/HD ZEVs across various communities that may otherwise not be able to pursue such opportunities, or where reducing pollution can have the most significant positive impact on the surrounding community. It is unclear, however, based on the information in the draft solicitation whether helping fleets plan for the adoption of ZEVs under this solicitation must necessarily be tied to a more regional planning effort. MD/HD fleets might be part of a regional planning effort but could also utilize this funding individually to help make the transition to ZEVs and evaluate charging infrastructure needs. We recommend providing additional clarification in the solicitation to enable both community and individual fleet planning transitions.

The draft solicitation states that "applicants may be eligible for future Clean Transportation Program funding" upon successful completion of a MD/HD ZEV blueprint.¹ Similar to the previous EV-ready community efforts, it would be helpful to further structure this as a two part competitive solicitation where entities can apply for implementation funding for various components of the blueprint once it is developed to ensure proposed actions are actually implemented. This may already be implied by the above statement in the draft solicitation, however, we encourage staff to more explicitly call out whether there is an opportunity for Phase 2 implementation funds similar to the previous community blueprints.

¹ ZEV MD/HD Blueprints Draft Solicitation Concept, April 2020, p. 3.

Under the minimum requirements for eligible projects and what should be included in the blueprints, it references identifying optimal locations for ZEV infrastructure and vehicle usage and driving patterns as key elements. Both of these are important elements for a blueprint but it is unclear from the information provided whether this is intended to include both public and private charging locations.² Given the different applications and use cases for MD/HD ZEVs, it will be important to evaluate different needs including public and private charging locations. To ensure all charging applications and use cases are considered within the blueprints, it is important to engage a variety of stakeholders including utilities, local jurisdictions, community-based organizations, fleet operators, and business among others, which can minimize risks and uncertainties, and as is highlighted in the proposed solicitation.³

Furthermore, the proposed solicitation calls for a blueprint to “analyze the combination of technologies and systems that potentially offer the best mix of economic, environmental and technical performance specific to the region.” Given the nascent state of MD/HD EVs and charging infrastructure, we agree that a blueprint can provide an overview of the current state of technology, but we caution against setting or mandating any specific standards, whether for vehicle grid integration (VGI) or interoperability, at this point.⁴ For instance, manufacturers are working toward developing a standard for heavy-duty charging, however, there will likely be some period of continued product improvement and innovation as new HD products come to market, which includes development and design of charging infrastructure. Recognizing some flexibility and opportunity for continued innovation in the blueprints will therefore be important.

Lastly, during the presentation at the April 2, 2020 workshop, staff noted that the blueprint should “identify how the project would impact the grid and potential grid management aspects.”⁵ While likely implied under this statement, we would encourage any blueprint to detail how it is working with or plans to work with key stakeholders, including utilities and fleet operators, to ensure heavy-duty power needs are accurately forecast. Tesla provided comments on the preliminary Transportation Demand Forecast highlighting that failure to adequately forecast market adoption is especially problematic for heavy-duty trucks, given that they will charge at high power levels and may require construction of new generation, and transmission capacity or substations in certain locations at even modest adoption levels.⁶ The blueprint, depending on which fleet types it is evaluating, is an opportunity to highlight these longer planning timelines and associated grid needs.

II. Block Grant for MD/HD ZEV Infrastructure

Generally, Tesla is supportive of creating an Energy Commission block grant program that more efficiently disburses funding for MD/HD EV charging infrastructure projects throughout California. Tesla also agrees with CALSTART’s previous comments that it is important to establish an on-going program rather than just conducting annual grant solicitations. Based on the workshop discussion, the block grant appears to be designed as an on-going program. As CALSTART highlights, “if significant funding can be put into a multi-year program, then this can provide the industry with the certainty necessary for them to make investment decisions, and determine how many vehicles they can afford to purchase for their public/ private fleet over the next 5-10 years. This would not preclude the CEC from awarding a smaller proportion of annual funds through grants to “special projects” for MHDV.”⁷

² ZEV MD/HD Blueprints Draft Solicitation Concept, April 2020, p.4

³ ZEV MD/HD Blueprints Draft Solicitation Concept, April 2020, p.4.

⁴ ZEV MD/HD Blueprints Draft Solicitation Concept, April 2020, p.5.

⁵ CEC Workshop Presentation Blueprint and Block Grant, April 2, 2020, slide 20.

⁶ Tesla Comments, Transportation Demand Forecast, August 5, 2019.

⁷ CALSTART Comments On Staff Workshop on Medium- and Heavy-Duty Vehicle Solicitation Concepts, Nov 12, 2019, p.4.

The draft solicitation also notes that the block grant recipient will be responsible for identifying MD/HD ZEV infrastructure projects incentives and provide a list of high-level minimum criteria and specifications. Given the number of elements that will need to be considered regarding the eligibility and block grant structure, we recommend requiring the block grant recipient to develop a more formalized process for seeking feedback from relevant stakeholders including fleet operators and MD/HD charging providers on how to best structure these elements. For instance, CALSTART previously suggested forming a program steering committee, considering setting annual fleet limits, and creating funding segments based on vehicle/fleet type.⁸

The current list of specific elements the block grant recipient should provide also includes reference to appropriate VGI standards and interoperable EV infrastructure.⁹ Regarding standards, it is premature to require specific standards, especially for HD EV infrastructure because of the technology's nascency. Further evaluation and stakeholder input should be conducted before standards adoption becomes a program a requirement. This should also be consistent with any guidelines CEC staff is developing specific to medium- and heavy-duty vehicles¹⁰ as was referenced in the Clean Transportation Program Investment Plan Update for FY20-23. Similarly, VGI requirements and standards may be premature and problematic dependent on the charging use case for a particular fleet, especially for on-demand high power fast charging. Therefore, the criteria for the proposed project team to administer the block grant that requires the applicant demonstrate experience in "MD/HD ZEV charging and refueling infrastructure markets (including trends and needs)"¹¹ is also critically important and should be weighted accordingly in the selection process.

Tesla looks forward to working with the program administrator of the block grant once selected and other stakeholders to ensure this program is efficient and effective in helping meet the near term needs of fleets and MD/HD vehicle operators in accessing the necessary infrastructure to transition to EVs.

Tesla appreciates the opportunity to provide feedback on proposed solicitations for blueprints and block grants for MD/HD EV infrastructure. ZEV infrastructure investments available from Energy Commission programs that complement other funding sources, such as those provided via CARB and CPUC, and enable successful deployments are important to help meet California's climate and air quality goals.

Sincerely,

Francesca Wahl
Charging Policy Manager, Business Development and Policy

⁸ CALSTART Comments On Staff Workshop on Medium- and Heavy-Duty Vehicle Solicitation Concepts, Nov 12, 2019, p.5.

⁹ Block Grant for MD/HD ZEV Infrastructure Incentive Projects Draft Solicitation Concept, April 2020, p. 5.

¹⁰ Clean Transportation Program Investment Plan Update, March 2, 2020, p.43.

¹¹ Block Grant for MD/HD ZEV Infrastructure Incentive Projects Draft Solicitation Concept, April 2020, Draft Solicitation, p.8.