

**DOCKETED**

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*Comment Received From: Cruise LLC  
Submitted On: 10/1/2020  
Docket Number: 17-EVI-01*

## **Cruise LLC Comments on CALeVIP September 2020 Workshops**

October 1, 2020

California Energy Commission  
Dockets Office  
1516 9th Street  
Sacramento, CA 95814

Dear California Energy Commission,

Cruise LLC respectfully submits the following in response to the California Energy Commission's (CEC's) proposed design changes to the California Electric Vehicle Incentive Project (CALeVIP).

We are in support of Governor Newsom's new Executive Order N-79-20 ("Executive Order") to mandate 100% zero emission light duty vehicle sales by 2035. In order to achieve this goal, rapid action and bold policies will be needed to catalyze adoption of zero emission vehicles (ZEVs) and accelerate transportation electrification in California. As the CEC reviews existing ZEV incentive programs and electrification policies, nimble approaches will be critical in addressing California's climate crisis and spurring a rapid transition to greener miles. With transportation accounting for over 40 percent of statewide emissions, and nearly 70 percent of that stemming from light-duty passenger vehicles, programs like CALeVIP are crucial to help achieve these goals.

In light of the challenge ahead to achieve new targets, as well as the existing goals for 250,000 chargers installed by 2025, Cruise welcomes the innovative approaches of the CEC in the two most recent workshops, such as broadening CALeVIP program eligibility and allowing flexibility in terms of deployed charging equipment. These are important steps in meeting the state's ambitious - and needed - goals for transportation electrification. Cruise utilizes CCS chargers for its EV fleet, and supports the CEC's proposal of at least 50% of rebated connectors as CCS for sites with 4 or more chargers. Ideally, site hosts and EVSE providers should have the flexibility to select connectors that best reflect market demand and operational requirements.

However, as Cruise and others have stated in previous CEC comments, we need all-in policy approaches that both address the various sources of California's transportation pollution while also providing sustainable transportation for those who cannot afford a ZEV or may not have access to charging - well-documented barriers to EV adoption in CA. Cruise believes that incorporating ridehailing use cases into CALeVIP can help further achieve the state's goals.

The California Air Resources Board (CARB) estimates that California's ridehailing fleet emits roughly 50 percent more CO2 per passenger mile traveled than average passenger vehicles. And while ridehailing accounts for only roughly 1% of California's light-duty vehicle miles traveled, it represents a much higher percentage of urban passenger travel - as high as 15% of total intra city trips. Research from UC Davis further finds that electrifying ridehailing vehicles can have three times the carbon reduction impact of electrifying a personal vehicle - speaking directly to CALeVIP's goals of reducing CO2 emissions and petroleum use while improving air quality. Electric ridehailing fleets can build on these gains through fleet-wide energy procurement decisions that can virtually eliminate carbon emissions across all vehicles - such as Cruise's commitment in April 2020 to charging with 100% renewables.

That is why Cruise is investing heavily in its DC fast charging network. Cruise currently operates over 50% of installed DC fast chargers in San Francisco. While our network is private due to co-located operating requirements and high utilization rates our chargers will exclusively serve the public's transportation needs. Through central ownership and operation of our charging sites, Cruise will offer safer, seamless, fully autonomous, and zero emission rides to the public - directly addressing the long-standing challenges of EV purchasing and charging constraints.

Furthermore, Cruise believes that the charger utilization rates for fleet applications could yield additional benefits as the CEC looks to deploy incentive funding as effectively as possible. Average public fast charger utilization rates in California are optimistically 25-30%. In contrast, centrally managed EV fleets with owned infrastructure are incentivized to maximize utilization rates to reduce expenses. If these fleets achieve utilization rates of 50-60%, public funding invested in rideshare-dedicated fast chargers for fleets could provide twice as many green miles to the public.

Yet despite the considerable benefits of electrified ridehailing, especially in urban use cases, CALeVIP's existing eligibility parameters do not reflect the changing nature of emerging mobility solutions. For example, privately owned chargers that will exclusively serve a public good - such as Cruise's DC fast charging network - remain ineligible for CALeVIP. In urban areas where vehicle ownership tends to be lower, it is critical that any state programs to electrify transportation are adjusted to include ridehailing and the unique infrastructure ownership models of new mobility.

As programs like CALeVIP are adjusted to reflect the new targets set out in the Executive Order, Cruise urges the CEC to update CALeVIP's existing program requirements to reflect and capture the benefits of emerging mobility trends such as shared autonomous electric fleets. These business models - while operating private chargers - exist exclusively to democratize access to greener miles and provide sustainable transportation options.

Cruise thanks the CEC for the opportunity to weigh in to these important policy matters. Developments in programs like CALeVIP will have long-lasting impacts on the success

of the state's ambitious electrification targets. Capturing the benefits of all available technologies and business models will therefore be critical in achieving our goals.

Respectfully,

Prashanthi Raman  
Director, Global Government Affairs  
Cruise LLC

*Additional submitted attachment is included below.*



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In light of the challenge ahead to achieve new targets, as well as the existing goals for 250,000 chargers installed by 2025,<sup>2</sup> Cruise welcomes the innovative approaches of the CEC in the two most recent workshops, such as broadening CALeVIP program eligibility and allowing flexibility in terms of deployed charging equipment. These are important steps in meeting the state's ambitious - and needed - goals for transportation electrification. Cruise utilizes CCS chargers for its EV fleet, and supports the CEC's proposal of at least 50% of rebated connectors as CCS for sites with 4 or more chargers. Ideally, site hosts and EVSE providers should have the flexibility to select connectors that best reflect market demand and operational requirements.

However, as Cruise and others have stated in previous CEC comments, we need all-in policy approaches that both address the various sources of California's transportation pollution while also providing sustainable transportation for those who cannot afford a ZEV or may not have access to charging - well-documented barriers to EV adoption in CA.<sup>3</sup> Cruise believes that incorporating ridehailing use cases into CALeVIP can help further achieve the state's goals.

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<sup>1</sup> California Air Resources Board, "2019 GHG Inventory", *GHG Current California Emission Inventory Data*, <https://ww2.arb.ca.gov/ghg-inventory-data>.

<sup>2</sup> Office of Governor Edmund G. Brown Jr., "Governor Brown Takes Action to Increase Zero-Emission Vehicles, Fund New Climate Investments", January 26, 2018, . <https://www.ca.gov/archive/gov39/2018/01/26/governor-brown-takes-action-to-increase-zero-emission-vehicles-fund-new-climate-investments/index.html>.

<sup>3</sup> Elkind and Lamm, "EVs and Global Urban Adoption - Policy Solutions from France and California", *Berkeley Law Center for Law, Energy, & The Environment*, November 2019, [www.law.berkeley.edu/wp-content/uploads/2019/11/Electric-Vehicles-and-Global-Urban-Adoption.pdf](http://www.law.berkeley.edu/wp-content/uploads/2019/11/Electric-Vehicles-and-Global-Urban-Adoption.pdf).



The California Air Resources Board (CARB) estimates that California's ridehailing fleet emits roughly 50 percent more CO<sub>2</sub> per passenger mile traveled than average passenger vehicles.<sup>4</sup> And while ridehailing accounts for only roughly 1% of California's light-duty vehicle miles traveled, it represents a much higher percentage of urban passenger travel - as high as 15% of total intra city trips.<sup>5</sup> Research from UC Davis further finds that electrifying ridehailing vehicles can have three times the carbon reduction impact of electrifying a personal vehicle<sup>6</sup> - speaking directly to CALeVIP's goals of reducing CO<sub>2</sub> emissions and petroleum use while improving air quality. Electric ridehailing *fleets* can build on these gains through fleet-wide energy procurement decisions that can virtually eliminate carbon emissions across all vehicles - such as Cruise's commitment in April 2020 to charging with 100% renewables.

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Furthermore, Cruise believes that the charger utilization rates for fleet applications could yield additional benefits as the CEC looks to deploy incentive funding as effectively as possible. Average public fast charger utilization rates in California are optimistically 25-30%.<sup>7</sup> In contrast, centrally managed EV fleets with owned infrastructure are incentivized to maximize utilization rates to reduce expenses. If these fleets achieve utilization rates of 50-60%, public funding invested in rideshare-dedicated fast chargers for fleets could provide twice as many green miles to the public.

Yet despite the considerable benefits of electrified ridehailing, especially in urban use cases, CALeVIP's existing eligibility parameters do not reflect the changing nature of emerging mobility solutions. For example, privately owned chargers that will exclusively serve a public good - such as Cruise's DC fast charging network - remain ineligible for CALeVIP. In urban areas where vehicle ownership tends to be lower, it is critical that any state programs to electrify transportation are adjusted to include ridehailing and the unique infrastructure ownership models of new mobility.

As programs like CALeVIP are adjusted to reflect the new targets set out in the Executive Order, Cruise urges the CEC to update CALeVIP's existing program requirements to reflect and capture the benefits of emerging mobility trends such as shared autonomous electric fleets. These business

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<sup>4</sup> California Air Resources Board, "SB 1014 Clean Miles Standard 2018 Base-year Emissions Inventory Report", December 2019, [https://ww2.arb.ca.gov/sites/default/files/2019-12/SB%201014%20-%20Base%20year%20Emissions%20Inventory\\_December\\_2019.pdf](https://ww2.arb.ca.gov/sites/default/files/2019-12/SB%201014%20-%20Base%20year%20Emissions%20Inventory_December_2019.pdf)

<sup>5</sup> SFCTA, "TNCs Today: A Profile of San Francisco Transportation Network Company Activity", June 2017, [https://www.sfcta.org/sites/default/files/2019-02/TNCs\\_Today\\_112917\\_0.pdf](https://www.sfcta.org/sites/default/files/2019-02/TNCs_Today_112917_0.pdf).

<sup>6</sup> Alan Jenn, "Emissions Benefits of Electric Vehicles in Uber and Lyft Services", *National Center for Sustainable Transportation - UC Davis ITS*, August 2019, <https://escholarship.org/uc/item/15s1h1kn>.

<sup>7</sup> Garrett Fitzgerald and Chris Nelder, "EVgo Fleet and Tariff Analysis - Phase 1: California", *Rocky Mountain Institute*, April 2017, [https://rmi.org/wp-content/uploads/2017/04/eLab\\_EVgo\\_Fleet\\_and\\_Tariff\\_Analysis\\_2017.pdf](https://rmi.org/wp-content/uploads/2017/04/eLab_EVgo_Fleet_and_Tariff_Analysis_2017.pdf).



models - while operating private chargers - exist exclusively to democratize access to greener miles and provide sustainable transportation options.

Cruise thanks the CEC for the opportunity to weigh in to these important policy matters. Developments in programs like CALeVIP will have long-lasting impacts on the success of the state's ambitious electrification targets. Capturing the benefits of all available technologies and business models will therefore be critical in achieving our goals.

Respectfully,

A handwritten signature in black ink, appearing to read "Prashanthi Raman". The signature is fluid and cursive, with a prominent initial "P" and a long, sweeping underline.

Prashanthi Raman  
Director, Global Government Affairs  
Cruise LLC