November 28, 2017

Andrew Panson
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Submitted via email to: andrew.panson@arb.ca.gov
Cc: stella.lingtaylor@arb.ca.gov

Re: Sierra Club Comments on "FY 2017-18 Funding Plan for Clean Transportation Incentives" as presented at the 10/4/17 CARB Workshop

Dear Mr. Panson:

Sierra Club appreciates the opportunity to comment on this funding plan.

We commend CARB staff on the careful thought on guiding principles developed to inform the creation of a funding plan that can make the most effective use of available funds to advance clean transportation.

We would like to offer the following recommendations and comments:

Enhancements to the HVIP Program.

1. **In the case of public transit, we fully support the concept that the HVIP program should largely cover the cost difference between existing fossil fueled buses and electric buses.** Therefore, we strongly support the proposed increase in incentive from $95,000 / 40' bus to $150,000 and the creation of a new incentive category for 60' buses at $175,000. While these amounts still do not cover the full delta, they are a significant improvement over the current levels. As the difference between costs for fossil fueled buses and electric buses gets smaller, we would expect the HVIP incentive to decline over time, but we recommend that CARB track the comparative bus costs closely and stay true to the objective of covering the cost difference. This will have the impact of having larger incentive amounts per bus in the early years, while over time the costs of electric buses, the delta and the amount of award per bus will decline. This will increase adoption and the number of vouchers issued will increase until full commercialization is reached and HVIP is no longer needed.
2. **Consider a higher incentive amount for 30-39' buses** - We recommend that further consideration be given to the amount of the incentive for 30-39' buses currently proposed to be $95,000. We believe that the current cost of these buses and the amount of cost delta with fossil fueled buses may warrant an increase in incentive amount to an amount

in the neighborhood of $125,000. Since these buses tend to be more prevalent in smaller and rural transit districts which often have fewer financial and human resources than larger agencies, a further increase may help make the difference between rural districts being able to acquire zero emission buses and not being able to.

Three Year Investment Strategy to Establish "Beachheads"

1. **We support migrating from one-year annual plans to a three-year plan –** The Funding Plan offers many important reasons why having a three-year plan allows incentives to more effectively drive introduction of beachhead technologies that can then both accelerate the commercialization of the core technology and spawn further introduction of related applications.
2. **Public Transit Agencies need certainty that HVIP funds will be there three years out when they need them.** Public transit agencies have to plan their bus acquisitions over many years and the shortest acquisition cycle is typically 2-3 years. If transit agencies would like to adopt zero emission buses but cannot be assured that the HVIP incentives will be there for them two or three years out, it may pose an obstacle to their transitioning their fleet. However, if they know that state funding pools are sufficient and what the incentive amounts will be, they can move their transition plan forward with certainty on the availability of these critical capital funds. Further we recommend that CARB put in place a rolling three-year plan to accomplish this objective. An additional process that could be included to help deal with this challenge would be to set up an escrow account. So, for example, if a transit agency makes a commitment in 2018 to purchase X number of electric buses in 2020, CARB could hold the incentive funds for these buses now and make them available when the funds are needed in 2020.
3. **Prioritize incentive support for critical beachhead technologies in the three-year plans.** In Table II-1 on page II-45 in the graphic of boxes for the types of technologies that would be supported in FY 2017-18, FY 2018-19 and FY 2019-20, it does not list battery electric transit buses in all three cycles. Since battery electric buses are a beachhead technology ready for significant increased adoption, they should be sufficiently prioritized for incentive funding support for several years to provide a strong market signal. Doing this will create quicker adoption, higher volume, more competitive prices and economies of scale that can lower costs not only for the buses but also for the key components of the electric drivetrain including batteries, electric motors and power controls. The faster these components can develop and realize reduced costs, the sooner they can be adapted to other applications and at lower costs. This will then accelerate adoption for these new applications – e.g. for shuttle buses, delivery trucks, refuse collection trucks, school buses, etc.

Sincerely,

Ray Pingle
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