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## Infrastructure Funding Gap for Non-Freight Vehicles

Additional submitted attachment is included below.

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As a California-based small business and manufacturer developing zero-emission all-electric powertrains for medium and heavy duty trucks, Motiv Power Systems knows firsthand how essential good policy has been to supporting sustainable solutions and high tech companies development here in California.

Motiv's all-electric powertrains are presently used in vehicles ranging from school and shuttle buses to delivery trucks and work trucks, allowing fleets to use zero-emission solutions that improve the local air quality, help meet the state's climate goals, and eliminate the need for fossil fuels. Our company would not exist as it is today without past investments from the California Energy Commission in emerging technologies. Given the importance of these investments in developing California's portfolio of solutions, staff's work is essential and the recent investment plan shows a methodical and detailed analysis leading to the current planned investments.

In the Energy Commission's 2018-2019 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program there is one area that Motiv is concerned is inadequately addressed: infrastructure needs for school buses and other zero-emission medium and heavy duty vehicles outside of the freight space. While funding constraints limit the ability to invest in everything, the focus on Advanced Freight and Fleet Technologies without any funds available for other vehicle applications means there is a funding gap that is a critical barrier to those vehicle applications.

While programs like CARB's Clean Truck and Bus Vouchers cover some of the incremental costs of adopting new technologies on the vehicle side, there is inadequate funding for the infrastructure to support those zero-emission vehicles. If the CEC could create a parallel program to HVIP where a fleet could access infrastructure funds when getting a new vehicle it would reduce the barrier to adoption of ZEVs not just in freight applications, but in all vehicle applications. For applications like school buses, where schools often lack adequate funding, any gap to support the full deployment of vehicles becomes a critical barrier. Infrastructure needs are partially addressed in the staff analysis of Senate Bill 110 which says, "These alternative fuel school buses may require new or upgraded fueling infrastructure at additional cost that may be funded through this category". While this has the potential to address the funding gap in infrastructure for school buses, there isn't a specific commitment to do so, and this commitment of funding is altogether lacking for other non-freight applications.

One of the key benefits of the HVIP program is the first-come, first-served approach allowing a fleet to get funding when they're ready to transition their vehicles to cleaner technologies regardless of the type of fleet. On the list of HVIP eligible vehicles there are shuttle buses, school buses, work trucks, delivery trucks, and more. All of these vehicle types also need the appropriate infrastructure. If power upgrades are needed or charging station install costs are a barrier to entry those vehicles will not deployed even if the vehicle technology exists and have incentive funds. Especially in disadvantaged communities where older facilities may be used, these costs can be substantial. Motiv believes the Energy Commission's experience in developing alternative vehicle technologies makes their knowledge of the infrastructure needed to support them unmatched, and thus the CEC would be the ideal place for such a program.

This would also align with the goals of Executive Order B-16-2012, an order calling for 1.5 million zeroemission vehicles (ZEVs) to be on the road by 2025, by enabling more fleets to adopt zero emission technologies. Motiv commends the CEC for the excellent work their staff has done to develop this investment plan and hopes the infrastructure gap for non-freight vehicles is considered in potential revisions.

Respectfully,

Urvi Nagrani Director of Business Development, Motiv Power Systems