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Momentum Comments Pre-Solicitation Concepts for MHD ZEV Infrastructure

Additional submitted attachment is included below.



July 30, 2024

Hannon Rasool, Director Fuels and Transportation Division California Energy Commission 715 P Street Sacramento, CA 95814

Subject: 19-TRAN-02 - Pre-Solicitation Concepts for Medium-and Heavy-Duty Zero-Emission Vehicle Infrastructure

Dear Mr. Rasool,

Thank you for the opportunity to provide input to the California Energy Commission (CEC) regarding the CEC's Pre-Solicitation Concepts for Medium- and Heavy-Duty (MHD) Zero-Emission Vehicle (ZEV) Infrastructure, with the intent of making those programs more robust and in alignment with the market's needs. The CEC's MHD ZEV infrastructure concepts leverage multiple proven programs and ZEV transition blueprints to accelerate MHD ZEV adoption across the state's critical industries. We commend the CEC for its leadership and urge the continuation of robust public engagement and investment in MHD ZEV infrastructure.

Since 2005, Momentum has helped raise \$5B+ in grants, loans, and other public incentives for projects valued at more than \$11B. We have worked closely with hundreds of clients, partners, consultants, and agency personnel from: public agencies, utilities, technology vendors, manufacturers, and project developers. Our team of scientists, engineers, finance and fund development professionals, commercialization experts, project managers, and administrators are committed to clarity of thought, client education, data-driven analysis, partnership development, and excellence in presentation. We conduct research, analysis, and strategic engagement to increase our clients' ability to access and manage public and private investment.

Concept 1: Charging and Refueling Infrastructure for Transport in California Provided Along Targeted Highway Segments (CRITICAL PATHS) 2.0

CRITICAL PATHS 2.0 aims to provide up to \$30 million in critical support for MHD ZEV hydrogen refueling and/or charging projects along designated freight corridors in alignment with SB 671¹ and the National Zero Emission Freight Corridor Strategy². The program will significantly enhance the availability of MHD ZEV infrastructure hubs, addressing a critical barrier to the adoption of zero-emission trucks. The \$6 million set-aside for hydrogen refueling projects will ensure state investments are available for hydrogen refueling technologies as well as electric vehicle charging, supporting the transition to cleaner energy sources, and reducing greenhouse gas emissions and pollution, particularly in freight corridors heavily impacted by

¹ https://catc.ca.gov/-/media/ctc-media/documents/programs/sb671/sb671-final-clean-freight-corridor-efficiency-assessment-dor.pdf

² https://driveelectric.gov/files/zef-corridorstrategy. pdf



diesel emissions. To maximize project outcomes, we encourage partnerships with private logistics and freight companies to leverage their expertise and investment capabilities. We also encourage allowing mixed-use sites that serve both public and private fleets to increase infrastructure utilization and promote financial viability. By coordinating strategies with other agencies, the program will support broader state goals and policies, fostering a unified approach to building out the necessary MHD ZEV infrastructure.

Concept 2: Implementation of MHD ZEV Infrastructure Blueprints 2.0

The MHD ZEV Infrastructure Blueprint Implementation Program would offer up to \$20 million to support MHD ZEV hydrogen refueling and/or charging projects developed from finalized blueprint planning documents. We strongly support the expansion of eligible applicants to include organizations that have developed blueprints for MHD ZEV Infrastructure not funded by CEC. By funding projects that have been meticulously planned with or without CEC funding, the program ensures that investments are strategic and impactful, filling critical infrastructure gaps. The focus on projects already identified in blueprints allows for targeted support where it is most needed, enhancing the likelihood of successful deployment. Encouraging private fleets identified in blueprints to participate also ensures that the infrastructure will meet the needs of the market and infrastructure will be highly- utilized. The ZEV market is ever evolving, and the blueprints do not change over time. In response to changing market dynamics, we also encourage the inclusion of new sites that have not been identified in a blueprint but are in alignment with the needs assessment from eligible applicant's initial blueprints.

Concept 3: Agriculture and Construction Infrastructure

The Agriculture and Construction Infrastructure Program will focus on deploying ZEV infrastructure to support the agriculture and construction sectors. We appreciate that the CEC is considering supporting the decarbonization of the off-road sector by allocating funding towards installing charging infrastructure in California's agriculture and construction sites. However, by restricting the definition of off-road to agriculture and construction, the CEC may miss several opportunities for innovation and impact. We recommend the CEC establish a set-aside for promising off-road projects outside of agriculture and construction. This approach would encourage a broader range of innovative solutions and accelerate the state's overall decarbonization efforts.

Additionally, off-road fleets would greatly benefit from the development of a Joint Solicitation between the CEC and the California Air Resources Board (CARB) that funds both the infrastructure and zero-emission vehicles. The CEC and CARB have a track record of collaboration and achieving great results through this approach, as shown in EnergIIZE's Drayage Set-Aside Program.

The inclusion of support for on-site energy generation and mobile charging solutions is also warranted due to the unique nature of off-road environments which often have limited electrical capacity. The project should also include provisions for comprehensive training programs and technical support to help the workforce transition to zero-emission technologies, ensuring smooth and successful adoption. By targeting the agriculture and construction sectors and other off-road applications, the program will address unique operational needs and challenges, supporting the adoption of ZEVs in industries that are critical to California's economy. Deploying infrastructure in rural and industrial areas also helps to reduce



emissions in regions that are often overlooked, contributing to statewide environmental goals. The program will send a strong market signal, encouraging manufacturers and suppliers to develop and offer more MHD ZEVs suited for off-road applications.

Concept 4: ZEV Port Infrastructure

The ZEV Port Infrastructure Program aims to deploy ZEV infrastructure to support port operations, a critical area for reducing emissions and improving air quality. Targeted infrastructure deployment at ports will have significant environmental and public health benefits, enhance operational efficiency, reduce reliance on diesel-powered equipment, and foster a cleaner and more sustainable logistics chain. The program will also help ports meet regulatory requirements and encourage innovation in zero-emission technologies tailored to port operations.

We support the CEC's recommendation of evaluating applications in two groups. One group for small ports and one for large ports. This will help promote equitable investment across the state's port portfolio. We also encourage promoting standardized and integrated infrastructure solutions that support multiple types of ZEVs, including trucks, cargo handling equipment, and shore power for vessels, creating a comprehensive zero-emission ecosystem. The program should also encourage collaboration between port authorities and operators to ensure that infrastructure projects align with port expansion plans and operational needs.

Addressing Interconnection Delays

We are excited to see California's commitment to its climate goals and the state's interest in deploying these projects as soon as possible. However, the current delays in interconnection faced by project developers could hinder this progress. We appreciate that the CEC is considering technologies to lower these barriers. We encourage the inclusion of temporary solutions, such as linear generators or mobile charging solutions, as eligible costs under these upcoming solicitations, if applicants submit a timeline for phasing them out. This flexibility will allow for the continued advancement of zero-emission vehicle infrastructure while addressing immediate logistical challenges.

Conclusion

Thanks again for the opportunity to provide comments on the CEC's MHD ZEV Infrastructure Solicitation Concepts. The planned programs will provide much needed investment towards achieving the state's MHD ZEV goals. We appreciate your consideration of our comments and look forward to working with the CEC to support the state's transition to MHD vehicles. If you have any questions, please feel free to contact me at dedrick@buildmomentum.io.

Sincerely,

Dedrick Roper

Director, ZEV Transition

Dedrick Roper

Momentum