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Air Liquide Comments 19-TRAN-02

Additional submitted attachment is included below.





April 16, 2020

California Energy Commission 1516 Ninth Street Sacramento, CA 95814

RE: Air Liquide Comments: 19-TRAN-02 Blueprints for MD/HD ZEVs and ZEV Infrastructure and Block Grant for MD/HD ZEV Infrastructure

Dear California Energy Commission Representatives:

Air Liquide would like to take the opportunity to comment on the design concepts outlined in 19-TRAN-02: *Blueprints for MD/HD ZEVs and ZEV Infrastructure* and *Block Grant for MD/HD ZEV Infrastructure*. Air Liquide is active in the California mobility market as a hydrogen station owner and as a hydrogen supplier into the broader transportation market. Infrastructure for refueling hydrogen fuel cell vehicles has become the limiting factor in enabling a broader rollout of this technology and in the MD/HD markets the state can play a critical role in enabling broader adoption with these investments. Our comments seek to further strengthen the program and to help insure its continued success.

Before proceeding with the specifics of information requested in the Plan, it is appropriate to thank the CEC and their staff for the continued open dialog and engagement in the ongoing programs. It is clear that stakeholder inputs in the areas of market development, renewable fuel production, and technology neutrality have been thoughtfully considered and are reflected in these latest concepts.

Balanced Technology Approach to Awards

To achieve optimal effectiveness of California's available investment funds, and to meet the state's desired goals for transportation, energy, and the environment, a variety of technologies will be needed to meet the needs of the MD/HD vehicle markets. While BEVs can provide solutions for short route, low utilization, and low capacity application, FCEVs are needed to meet the news of the high mileage, high utilization, and large capacity users. Both technologies will be needed to enable broad adoption in these markets and this should be reflected in state investments for both the Blueprinting and the Block Grant programs outlined in 19-TRAN-02.

Blueprinting Awards

The proposed blueprinting process will be a valuable tool for planning and investment provided they are awarded to appropriate projects with the appropriate balance regarding technologies, regions, and transportation sectors. Given the very limited description of criteria for eligible projects combined with the awards being prioritized on a first-come-first-served basis, we are concerned that the awards may not result in such a balance across projects. We suggest that CEC provide a more detailed list of requirements for eligible projects and that it include an award process that takes these requirements into consideration in selection of awards. Using the ZEV Readiness Plans developed through similar CEC funding as a template for a successful blueprint, we would encourage the CEC to develop evaluation criteria for proposed Blueprints and then to award based on relative scoring against these criteria. This process would then enable CEC to ensure a balanced portfolio of awards.

Selection of the Block Grant Administrator

The selection of the Block Grant Administrator will be critical to ensuring that the \$50M state funds are distributed in a manner that maximizes value to the state. We believe that the Administrator should be required to demonstrate an effective project selection process that will insure balanced awards to both FCEV and BEV technologies. The state will only meet its medium- and heavy-duty transportation targets if all sectors and ZEV technologies are considered in these early stage investments in infrastructure.

It is these early investments that allow for operators to make initial technology adoptions before making the commitment to their broader vehicle fleets and operations. Without a balanced investment, one technology or the other will not be enabled to best serve the market or be adopted in a timeline compatible with state goals. We encourage the CEC to either set a requirement for balanced awards, or for the applicants to propose a project selection process that will insure such balance.

Given the importance of selecting a qualified administrator to oversee a \$50M grant program, we recommend that CEC engage stakeholders in further discussion or workshops, as appropriate.

We appreciate the opportunity to comment on these program concepts and for your consideration of our suggestions. If you have any questions or comments on our approach, please contact me at any time.

Sincerely,

David P. Edwards, PhD

Director, Hydrogen Energy

Air Liquide

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