California Energy Commission
DOCKETED
14-IEP-1B
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California Energy Commission 1516 Ninth Street Sacramento, CA 95814-5512

Re: Docket No. 14-IEP-1B - Measuring the Success of ARFVTP

Dear Commissioner Scott, Staff and Members of the ARFVTP Advisory Committee,

We appreciate the stated commitment of the CEC to develop and implement transparent metrics for evaluating ARFVTP projects and budget allocations as required under AB8 and AB109. AB109 required that the CEC and ARB "ensure that the results of the reductions in emissions or benefits [from funded projects] can be measured and quantified" and that the agencies implement "an evaluation" of the benefits of funded projects. The CA Health & Safety Code prescribes clear criteria, as cited below, for evaluating the potential benefits of proposed projects. In addition, the intent of specifying these criteria in the Code was not just to evaluate project performance in arrears or for project selection, but to "provide the Legislature with all of the necessary information to fully understand how and why funds are to be allocated and prioritized within the program" as specified in Article 1, Section 44272.7.

ARB has developed a methodology to assess the potential benefits of specific programs as well as proposed projects for the AB8 AQIP funding¹. The CEC still needs to develop a similar methodology to justify proposed funding allocations in each annual investment plan and to be used to evaluate specific project applications. In particular, a "benefit-cost score" as prescribed in Section 44272 is the critical measure to estimate the return on invested funds. We are requesting that the CEC immediately develop and implement a methodology for both (1) estimating the potential "benefit-cost" of proposed funding allocations in the annual investment plan, and (2) evaluating project proposals.

Implementing a Metrics Methodology for CEC ARFVTP Budgeting

Background – CA Health & Safety Code, Chapter 8.9 requires that the following criteria be used for evaluating projects:

Article 2, Section 44272 – (c) The commission shall provide preferences to those projects that maximize the goals of the Alternative and Renewable Fuel and Vehicle Technology Program, based on the following criteria, as applicable:

(1) The project's ability to provide a measurable transition from the nearly exclusive use of petroleum fuels to a diverse portfolio of viable alternative fuels that meet petroleum reduction and alternative fuel use goals.

¹ http://www.arb.ca.gov/msprog/aqip/fundplan/fy1415_funding_plan_aqip_ggrf_appendix_a_final.pdf

- (2) The project's consistency with existing and future state climate change policy and low-carbon fuel standards.
- (3) The project's ability to reduce criteria air pollutants and air toxics and reduce or avoid multimedia environmental impacts.
- (4) The project's ability to decrease, on a life-cycle basis, the discharge of water pollutants or any other substances known to damage human health or the environment, in comparison to the production and use of California Phase 2 Reformulated Gasoline or diesel fuel produced and sold pursuant to California diesel fuel regulations set forth in Article 2 (commencing with Section 2280) of Chapter 5 of Division 3 of Title 13 of the California Code of Regulations.
- (5) The project does not adversely impact the sustainability of the state's natural resources, especially state and federal lands.
- (6) The project provides nonstate matching funds. Costs incurred from the date a proposed award is noticed may be counted as nonstate matching funds. The commission may adopt further requirements for the purposes of this paragraph. The commission is not liable for costs incurred pursuant to this paragraph if the commission does not give final approval for the project or the proposed recipient does not meet requirements adopted by the commission pursuant to this paragraph.
- (7) The project provides economic benefits for California by promoting California-based technology firms, jobs, and businesses.
- (8) The project uses existing or proposed fueling infrastructure to maximize the outcome of the project.
- (9) The project's ability to reduce on a life-cycle assessment greenhouse gas emissions by at least 10 percent, and higher percentages in the future, from current reformulated gasoline and diesel fuel standards established by the state board.
- (10) The project's use of alternative fuel blends of at least 20 percent, and higher blend ratios in the future, with a preference for projects with higher blends.
- (11) The project drives new technology advancement for vehicles, vessels, engines, and other equipment, and promotes the deployment of that technology in the marketplace.
- (d) The commission shall rank applications for projects proposed for funding awards based on solicitation criteria developed in accordance with subdivision (c), and shall give additional preference to funding those projects with higher benefit-cost scores.

Article 1, Section 44270.3. For the purposes of this chapter, the following terms have the following meanings:

(a) "Benefit-cost score," for the Alternative and Renewable Fuel and Vehicle Technology Program created pursuant to Section 44272, means a project's expected or potential greenhouse gas emissions reduction per dollar awarded by the commission to the project from the Alternative and Renewable Fuel and Vehicle Technology Fund.

The Problem and a Solution – The criteria set forth above are required by statute but the CEC has still not developed a transparent methodology to quantify these criteria and include them in the explanation of how and why the annual investment plan will effectively meet the stated goals of the program. This means that the effectiveness of both the initial allocation into funding categories and the funding of specific projects is difficult to evaluate by the advisory committee and the legislature. However, each of the evaluation criteria is already being quantified and scored based upon similar methodology for programs such as the AQIP program. The CEC can and should work to develop a similar methodology to estimate the impact and efficacy of proposed funding allocations for the AB118 ARFVT program before finalizing annual budget allocations and should use similar methodology to evaluate individual projects and assess program effectiveness in arrears.

The CEC could use any of several different methodologies for estimating the benefits of funding specific programs and for evaluating project proposals. Rather than detail those here we recommend that the staff work with a special advisory panel to develop and refine a methodology that fits the needs of the program. We are not requesting, nor does the code require, a prescriptive formula for funding allocations. However, the Code does require clear and transparent quantifiable metrics to justify how and why each investment plan will meet the goals of the program. To date, annual investment plans have not included either estimated benefits from proposed funding or "benefit-cost" assessments of the efficacy of prior funding for a category.

Balancing near and long term benefits – We acknowledge the complexity of applying metrics to a long term program such as the ARFVTP where some benefits may be achieved more quickly and more directly than others. There is a difference between evaluating the direct impacts of current programs and evaluating the future impacts of "transformative" technology. There is also a difference in the accuracy of long term estimates versus immediate ones. However, several approaches have been used by other programs and agencies to evaluate and balance these considerations. The ARFVT program was implemented to meet nearer term 2020 goals as well as long term 2050 vision. Therefore it is important to develop a methodology that accounts for both direct and indirect benefits as well as any time lag and uncertainty associated with achieving those benefits. A simple framework can do that through discount rates and other means. We are happy to work with the staff to detail different simple approaches.

Recommendation – A special advisory panel should be formed to create a metrics methodology that can be presented to the CEC Commissioners, staff and AB 118 Advisory Committee for consideration in evaluating programs and guiding future ARFVTP budget allocations to meet the requirements set forth in AB109. The panel should be a small, dedicated group empaneled immediately, and, with the help of CEC staff and contractors (NREL, Rand), report their results in time for the next AB118/AB8 budget cycle. The panel should remain in place to make periodic adjustments to the metrics methodology based upon results and evolving circumstances.

In any case, a clear metrics methodology will enable the Commission to better weigh and balance award making, further improve its strategy for achieving future goals, and increase the transparency of the programs to reduce conflict over funding choices.

Respectfully submitted,

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Will Coleman (on behalf of Onramp Capital)

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Supporters:

Baker Commodities, Inc.

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Propel Fuels, Inc.

San Diego Airport Parking Company

Springboard Biodiesel, LLC

Altitude Fuel

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