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Advisory Committee feedback on 2021-2023 Investment Plan

Additional submitted attachment is included below.

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May 14, 2021

Commissioner Monahan
California Energy Commission
1516 Ninth Street, 1st Floor
Sacramento, California 95814

Re: Docket No. 21-ALT-01, Advisory Committee feedback on 2021-2023 Investment Plan for the Clean Transportation Program

Dear Commissioner Monahan,

The California Fuel Cell Partnership (CaFCP) respectfully submits this comment letter to the California Energy Commission (CEC) in response to 21-ALT-01, the Clean Transportation Program's 2021-2023 Investment Plan. Based on the draft staff report, staff presentation, and the discussion during the April 29, 2021 Advisory Committee meeting, we present the following summarized comments.

- ***California needs every ZEV it can get*, providing choice and opportunity for all Californians.**
- **To achieve California's ZEV objectives and environmental goals the state and CTP have the responsibility *to support all ZEVs and position them for market success*.**
- ***Acceleration of ZEVs and supporting infrastructure now is critical* to achieving state objectives and overall success, with public investments prioritizing development of self-sustaining ZEV markets and environmental benefits for all.**

As a national and global leader, CEC has advanced alternative fuels and vehicles, including hydrogen and fuel cell technologies, through sustained leadership and focused programs. Through this leadership, and in coordination with other agencies and industry, CEC and California continue to make progress towards state goals and drive us all towards clean, sustainable energy and transportation systems. Collectively, great progress has been made, yet our goals still lay in front of us, and now is the time to aggressively push forward. CaFCP offers the following detailed feedback and a continued commitment to working closely with CEC.

***California needs every ZEV it can get*, including light- and heavy-duty fuel cell electric vehicles (FCEVs), providing choice and opportunity for all Californians as a critical part of achieving state ZEV and environmental targets.**

While California has made great strides in its ZEV rollout and environmental goals, we are still far behind all our vehicle and infrastructure targets. The addition of even greater objectives, such as the Governor's recent Executive Order EO-79-20, highlights the transition from milestone setting to achieving the full transition to zero emission mobility in all our light- and heavy-duty applications.

California is a large, diverse state with many different geographies, populations and lifestyles. This diversity requires a variety of zero-emission vehicle options and technologies that enable every Californian to access and participate in this transition; including both battery electric and fuel cell electric vehicles. The two technologies are complimentary, with FCEVs providing the fast fill, long range option that is accessible to high-density housing, extreme temperature performance and long distance or "super commuter" lifestyles, with little to no change in consumer behavior or obstacles to widespread adoption with accessible public infrastructure.

California has set vital transportation and energy goals on aggressive timelines, and hydrogen fuel cell vehicles are a crucial element for achieving these objectives.

California's ZEV program and associated activities were purposely designed to enable market development of every qualified ZEV technology, giving consumers and industry choice and diversity in meeting state environmental goals. The Clean Transportation Program has developed many valuable tools yet would benefit the program and state objectives by applying similar "support to succeed" mentality across the program and technologies to position them all for market success.

The ZEV regulation was developed decades ago with the objective to achieve a zero-emission transportation system by developing industry targets and timelines agnostic to any specific technology. It recognized the need for the market – industry stakeholders and consumers – to develop and decide among the available options that would deliver that objective. Subsequent regulations and programs, from the Governor's Executive Order EO-79-20 to the Innovative Clean Transit and Advanced Clean Truck regulations, took similar objective approaches to ensure market evolution in a way that government could step back from early market development subsidies, creating an environment where industries could step in as primary investment drivers, and consumers and fleets are provided choice and options in mobility that meet state goals *and* their own diverse needs and circumstances. Battery and fuel cell electric vehicles, leveraging the two energy carriers which can deliver the fully decarbonized, zero-emission products that meet all these needs, are the complimentary bookends that have resulted from this sound, objective policy approach.

The Clean Transportation Program has progressed dramatically over the years, constantly refining and improving its approaches to achieving these objectives while retaining its original flexibility and spirit. The CEC and staff deserve great accolades for developing effective and impactful analysis tools and activities for battery electric vehicles that have resulted in strong market signals and development. These include the EVI-Pro tool (focused on short-distance BEV charging needs), EVI-Pro RoadTrip (focused on long-distance BEV charging needs), HEVI-Pro (medium- and heavy-duty EV infrastructure projections), the CALeVIP program (providing streamlined charger

incentives), and the WIRED model (identifying Wide-spread Infrastructure for Ride-hailing EV Development). Collectively these tools have been developed across CEC and its programs, purposely taking a holistic "plan to succeed" approach that has proven successful for BEVs and charging deployment.

Now is the time for CEC to take a similar holistic approach to supporting hydrogen and FCEVs to position them for success in meeting accelerating ZEV and state environmental objectives. The Clean Transportation Program has leveraged both in-house staff and contracted experts such as the National Renewable Energy Lab and others and proven it has the muscle, mentality and commitment to advance ZEV deployments. Now is time to enable *all* ZEV technologies in positions to contribute to our objectives and meet California's climate goals.

Acceleration of ZEVs and supporting infrastructure, now, is critical to achieving state objectives and overall success, with public investments prioritizing development of self-sustaining ZEV markets and environmental benefits for all. Strong moves by government, now, including policies and signals that accelerate private investment are needed to meet 2035 and 2045 ZEV transitions in time.

The more public and private stakeholders can do today to accelerate market development, the faster the transition to 100% ZEV and fueling infrastructure will occur. State analysis illustrates that despite progress towards ZEVs generally, we are behind all our vehicle and infrastructure milestones. Furthermore, our objectives have moved from milestones to full transition to zero-emission mobility across light- and heavy-duty applications. Our criteria for meeting our objectives must also focus more acutely towards these final targets and make the most of every action and investment to reach our objectives sooner.

The CEC staff and Clean Transportation Program have successfully demonstrated they can adapt and improve processes to accelerate our collective efforts. The last hydrogen solicitation is an example of shifting public funding investments towards projects that actively develop a sustainable ZEV market and enable the move away from necessary early public subsidies. The last hydrogen station awards resulted in a magnitude increase in number of stations funded, shifted cost share from primarily public to private investment funding, significantly decreased supply chain and development costs, and focused on creating market economies of scale.

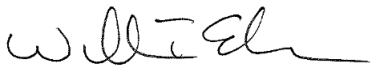
It is critical that Clean Transportation Program investments now focus on criteria that actively enable the development of a sustainable ZEV market. This is crucial to finishing out the current program, yet even more important, adopting this philosophy will pivot reauthorization discussions toward a financially self-sustaining ZEV future, and not endless reauthorization of subsidies. The recent draft Hydrogen Station Network Self-Sufficiency Analysis by [1]the Air Resources Board illustrates the direction California and the Clean Transportation Program can take, as well as how close the light-duty hydrogen FCEV market is to reaching the full ZEV market transition. This report states that with continued California leadership and investment the light-duty hydrogen FCEV market can be self-sustaining within the decade – *the first visible pathway to a sustainable ZEV market in California, or the world!* This is what the original ZEV regulation and subsequent California activities have been developed to achieve. By considering

[1] https://ww2.arb.ca.gov/sites/default/files/2020-11/ab_8_self_sufficiency_report_draft_ac.pdf

market development criteria, now, all the Clean Transportation Program investments will be more focused on achieving the ZEV transition and our collective objectives.

The CEC Commissioners and staff have done a tremendous job developing, implementing and adapting the Clean Transportation Program year in and year out. The progress has been significant and deserves respect and acknowledgement. However, we have not yet achieved our objectives and must continue to strive to do more to achieve all we can here in California, and as examples for others across the United States and globe. We look forward to continuing our collaborative efforts to achieving our goals and working with CEC and this program. Thank you for the opportunity to participate and provide these comments.

Respectfully,



William Elrick
Executive Director

CC: Tyson Eckerle, Governor's Office of Business and Economic Development
Chair Liane Randolph, Air Resources Board
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