



DRIVING FOR THE FUTURE

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Powertech Labs
Proton OnSite

Sandia National Laboratories
Southern California Gas Company

SunLine Transit Agency
University of California, Berkeley
US Hybrid

November 18, 2013

California Energy Commission
Dockets Office, MS-4

Re: Docket No. 13-ALT-02, 2014-2015 Investment Plan
1516 Ninth Street
Sacramento, CA 95814-5512

California Energy Commission

DOCKETED
13-ALT-02

TN 72356

NOV. 18 2013

Dear Commissioner Scott and CEC staff:

The California Fuel Cell Partnership is pleased to provide input on the Staff Draft 2014-2015 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program. We appreciate the continued investment of \$20M in 2014-2015 funds to build hydrogen infrastructure. These funds provide essential cost-share to businesses that are building the early market network to support commercial launch of fuel cell electric vehicles. With automakers now announcing their 2014 and 2015 FCEV product offerings, California's continued investment sends a vital signal and builds confidence among all early market participants.

Please also consider the following additional comments:

"Alternative Fuel Production" – Currently this category is entirely focused on biofuel production. As suggested in CaFCP's September 13, 2013 comments, consider expanding this to "renewable fuels" and cost-share development and implementation of large scale (>500kg/day) renewable hydrogen fuel production in California. This will help prove out large-scale renewable hydrogen pathways and reduce "at the pump" cost of renewable hydrogen fuel.

"Alternative Fuel Infrastructure" – We suggest the following minor adjustments:

- When describing the GHG benefits of FCEVs, make a notation that according to CARB's Low-Carbon Fuel Standard CO₂ intensity ratings, hydrogen used in a FCEV results in virtually the same GHG benefit as electricity used in a PEV.
- Correct the discrepancy between text in paragraph 3 on p22 and Table 7 on p23 regarding the number of stations expected to be funded under the upcoming \$29.9M PON (text says 15-17, table says 13-15).

"Alternative Fuel and Advanced Technology Vehicles" – Consider including a placeholder for funding the Clean Vehicle Rebate Project (administered by CARB) specifically for FCEVs because they are entering the market later than plug-in electric vehicles and will require similar support to what PEVs have enjoyed over the past years. At a minimum, adjust the investment plan text to

reflect that vehicle incentives are for both FCEVs and PEVs. For example, on page 3 of “Introduction”, paragraph beginning “Deployment incentives for light-duty plug-in-electric vehicles...” should also state that incentives apply to fuel cell electric vehicles. Similarly, page 29 of Chapter 5 “Alternative Fuel and Advanced Technology Vehicles” is headed “Light-duty Plug-In Electric Vehicles” and describes the CVRP. Change the header to “Light-Duty Electric Vehicles” to be consistent with Table 1 on page 9 and discuss applicability of CVRP to FCEVs as well as PEVs.

“Medium and Heavy Duty Demonstration” – Include a fuel cell vehicle example in the description of medium- and heavy-duty demonstration projects. Two California transit agencies are demonstrating fuel cell electric buses in regular transit service. Twelve years of on-road demonstration, data collection and evaluation by U.S. DOT and U.S. DOE (http://www.nrel.gov/hydrogen/proj_fc_bus_eval.html) show that fuel cell electric buses are ready for larger scale deployment as described in CaFCP’s *[“A Road Map for Fuel Cell Electric Buses in California.”](#)* CEC funding can leverage federal and local support for Northern and Southern public transit agencies to purchase a total of 80 heavy-duty zero emission fuel cell buses in 12-year revenue service according to our roadmap.

“Other Categories: Emerging Opportunities” – With recent PONs requiring CSA HGV 4.3 test methods to evaluate station fill performance, early market participants would benefit from a CEC cost-shared project to develop and validate a testing device to qualify California hydrogen stations and to provide support to station operators (as part of O&M) to use the device to test to the most recent edition of SAE J2601. CEC may find opportunities to cost-share such a project with DOE through a FOA or through other co-funding opportunities such as partnering with national laboratories that are active in hydrogen infrastructure projects within California.

Thank you for your leadership in helping develop the commercial market for fuel cell electric vehicles and fuel cell electric buses and for the opportunity to provide comments. Please do not hesitate to contact me at (916) 371-2844 or cdunwoody@cafcp.org if you have any questions or require clarification.

Sincerely,

A handwritten signature in blue ink, reading "C Dunwoody". The signature is fluid and cursive, with the first name "Catherine" being more prominent than the last name "Dunwoody".

Catherine Dunwoody
Executive Director

cc: Charles Smith