

Background for Pre-Solicitation Workshop on Implementing California's Zero-Emission Vehicle (ZEV) Readiness Plans

Who Should Attend? Individuals involved in local and regional government such as members of Plug-in Electric Vehicle Coordinating Councils, permitting officials, city planners, Air Quality Management Districts, federal agencies, consulting firms, laboratories, consortia, coalitions, fire marshals, researchers, and non-governmental organizations. Anyone interested in providing the California Energy Commission and the public with input on an upcoming ZEV Readiness Plan solicitation is welcome.

What is the Purpose? The purpose of this Workshop is to bring together various stakeholders and to provide a forum for stakeholder input on how the California Energy Commission can optimize the structure of a future solicitation to:

1. Enable regions to implement existing plug-in electric vehicle plans.
2. Assist regions that have, or plan to have, hydrogen refueling stations with implementing activities that will spur the commercialization of hydrogen fuel cell electric vehicles.

Background: The *2013-2014 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP)* allocated \$3.5 million for Regional Alternative Fuel and Readiness Planning efforts. A solicitation based on this funding will provide funds to implement and extend the impact of existing planning efforts for both plug-in electric vehicles (PEVs), fuel cell electric vehicles (FCEVs) and their respective infrastructure. Funds for implementation could fulfill staffing and resource needs for activities such as training, education, outreach, development of communication channels, signage, and coordination with cities, other regions, and various state agencies and representatives.

The previous two planning-related solicitations (PON-10-602 and the current PON-13-603) provided funding for the development of ZEV plans and strategies. This proposed solicitation would provide funds to implement the activities within those plans once PON-13-603 is closed. To be eligible, applicants must have finalized and adopted regional PEV readiness plans (whether or not funded by the Energy Commission) or must plan to assist in regions with existing or planned hydrogen fueling stations. The proposed solicitation will allow an applicant to apply for funds for PEV- and/or FCEV-related activities not previously included in other grant agreements.

Possible Plug-in Electric Vehicle (PEV) and Infrastructure Implementation Activities:

Potential applicants: Entities representing regions that have adopted PEV plans completed.

Over the past several years, the Energy Commission staff received input from representatives of cities, counties, and regions citing insufficient staff and resources to implement desired PEV readiness activities.¹ Many of the activities require extensive staff time and resources to reach out to other cities within the region, coordinate best practices, assist with EVSE siting issues as well as a variety of educational efforts. This solicitation may provide funds to entities for activities such as:

1. Implementing the streamlining of permitting and inspection processes, including outreach to city permitting offices and inspectors, development of online permitting and informational websites, dissemination of best practices and standardization of permit fees. Work with the Permitting Ombudsman in the Governor's Office of Business and Economic Development to facilitate and accelerate the permitting and establishment of charging infrastructure.
2. Siting of EVSE using existing infrastructure plans and communication with potential site owners and utility companies associated with the site.
3. Installing signage at public PEV charging stations that informs drivers of prices per unit of measure and applicable charging voltages, as well as way-finding signage.
4. Coordination with contractors, inspectors and utilities to improve EVSE installation process in residential multi-unit dwellings, public sites, workplaces and corridors.
5. Promoting EV awareness through education, outreach and marketing activities targeted at consumers, business owners, workplaces, local government staff, car dealerships and fleet owners. Activities may include marketing programs, websites, social media, ride and drives, brochures and training programs.
6. Safety training for emergency first responders for plug-in electric vehicles and EVSE.
7. Ongoing planning and development of a regional PEV eco-system.
8. Establishing PEV loan programs with local car rental companies, including provision of infrastructure funding and rental rate subsidies.

¹ See examples of PEV Community Readiness Plans at <http://www.evcollaborative.org/pev-readiness-reports>.

Possible Fuel-Cell Electric Vehicle (FCEV) and Infrastructure Implementation Activities:

Potential Applicants: Entities representing areas where hydrogen stations exist or are planned.

Existing Planning Efforts: The state has several planning efforts led by the California Fuel Cell Partnership, the Energy Commission and the Governor's Office summarized below:

1. *California Fuel Cell Partnership (CaFCP)*

In 2012 the California Fuel Cell Partnership (CaFCP) published a road map calling for 68 hydrogen fueling stations in 5 early market regions, including connector and destination stations, to create a statewide network and enable early market launch of fuel cell electric vehicles (FCEVs). CaFCP will publish a status report in spring 2014. Each year CaFCP's community readiness program reaches hundreds of first responders, fire marshals and station permittees to increase awareness of hydrogen fuel and fuel cell electric vehicles. This program is a resource for communities as funded stations are developed.

2. *California Energy Commission*

The Energy Commission has funded \$36.8 million for 16 hydrogen refueling stations for light duty vehicles (including one bus-only station), 2 upgrades to existing stations, and potentially 4 more upgraded hydrogen refueling stations in California through its recent solicitations. In addition, the current PON-13-607 "Hydrogen Refueling Infrastructure" provides \$29.9 million in funding for hydrogen refueling stations. The Governor recently signed Assembly Bill (AB) 8 (Perea, Chapter 401, Statutes of 2013), which commits the California Energy Commission to fund \$20 million for hydrogen refueling stations each fiscal year through 2023 with the goal of establishing approximately 100 stations statewide.

3. *Governor's Office of Business and Economic Development*

The ZEV Ombudsman within the Governor's Office of Economic and Business Development (GO-Biz) expects to conduct an analysis on a station-by-station basis of proposed hydrogen refueling stations to determine their status, site design suitability, engineering design, permitting and environmental concerns. They also expect to develop programmatic environmental impact Reports (EIRs), where applicable, and other streamlining tools and opportunities to assist with the permitting of hydrogen refueling stations and electric vehicle charging infrastructure that are acceptable to regional authorities. Two programmatic EIRs are most likely to be developed: one for Northern California and one for Southern California. GO-Biz will leverage the efforts of the Energy Commission, CaFCP, and the California Air Resources Board to provide outreach and education services.

Possible Solicitation Elements:

This solicitation may provide funds for the following activities:

- Work with GO-Biz ZEV Ombudsman to facilitate and accelerate the permitting and establishment of hydrogen refueling stations and infrastructure.
- Safety training and development of materials for emergency first responders, fire marshals and fire departments for FCEVs and hydrogen fueling stations.
- Promote FCEV awareness through education, outreach and marketing activities targeted at consumers, business owners, workplaces, local government staff, car dealerships and fleet owners. Activities may include marketing programs, websites, social media, ride and drives, brochures and training programs.
- Work with the California Department of Food and Agriculture, Division of Measurement Standards to install signage at hydrogen fueling stations that inform drivers of prices per unit of measure and filling pressures, as well as way-finding signage.
- Meet with local officials regarding siting of hydrogen facilities and reach out to local city officials regarding hydrogen fueling stations.
- Evaluate traditional and non-traditional retail fueling sites and address permitting issues.
- Interpret new CaFCP Roadmap Status Report and encourage facilitation with hydrogen fuel station providers.
- Evaluate and make choices regarding the National Fire Protection Association (NFPA2) codes (including supporting local officials to apply NFPA2 codes to specific hydrogen station projects).

Questions for workshop participants (may respond at workshop or in writing):

1. Who is likely to apply for PEV implementation funding? For FCEV implementation?
2. Are there additional activities that should be considered and why?
3. What are the highest priority needs of local government in implementing existing ZEV plans?
4. What level of funding is necessary to achieve the ZEV goals in a region?

Resources:

Investment Plan for the Alternative and Renewable Fuel and Vehicle Technology Program

<http://www.energy.ca.gov/2013-ALT-02/>

The 2013 ZEV Action Plan may be found at

[http://opr.ca.gov/docs/Governor's_Office_ZEV_Action_Plan_\(02-13\).pdf](http://opr.ca.gov/docs/Governor's_Office_ZEV_Action_Plan_(02-13).pdf)

The Zero-Emission Vehicles in California: Community Readiness Guidebook
http://opr.ca.gov/docs/ZEV_Guidebook.pdf

PEV Collaborative Statewide and Regional PEV Readiness Reports
<http://www.evcollaborative.org/pev-readiness-reports>

California Fuel Cell Partnership
<http://cafcp.org/>

Hydrogen Station Information
<http://cafcp.org/stationmap>
http://www.afdc.energy.gov/fuels/hydrogen_locations.html

Electric Vehicle Charging Infrastructure Solicitation
<http://www.energy.ca.gov/contracts/transportation.html#PON-13-606>

Hydrogen Refueling Infrastructure
<http://www.energy.ca.gov/contracts/transportation.html#PON-13-607>

Alternative Fuel Readiness Plans Solicitation
<http://www.energy.ca.gov/contracts/transportation.html#PON-13-603>