



Notice of Staff Workshop

California Energy Commission Vehicle-Grid Integration Roadmap Stakeholder Workshop

California Energy Commission staff will conduct a workshop to gather input from stakeholders on a draft outline of a Vehicle-Grid Integration Roadmap document on:

Tuesday, October 8, 2013
9:30 am – 5:00 pm
CALIFORNIA ENERGY COMMISSION
1516 Ninth Street
Hearing Room A
Sacramento, California
Wheelchair Accessible

Remote Access Available by Computer or Phone via WebEx™
(Instructions below)

Background

In March 2012, Governor Brown issued an executive order directing state government to help accelerate the market for zero-emission vehicles (ZEVs) in California. Executive Order B-16-2012 establishes milestones on a path toward 1.5 million ZEVs in California by the year 2025. The 2013 ZEV Action Plan is the product of an interagency working group led by the Governor's Office that includes the California Energy Commission and several other state agencies and associated entities. The Action Plan identifies specific strategies and actions that state agencies will take to meet the milestones of the executive order.

As part of the 2013 ZEV Action Plan, the Energy Commission and the California Independent System Operator (California ISO) seek to develop a roadmap to commercialize vehicle-grid integration services provided by Plug-in Electric Vehicle (PEV) batteries. Vehicle-grid integration services involve a suite of managed and smart PEV charging capabilities, including one-way or two-way charging.

In October 2012 and February 2013, the California ISO administered two workshops to solicit feedback from stakeholders for the creation of a Vehicle-Grid Integration Roadmap. In June 2013, the Energy Commission executed a work authorization with DNV KEMA (KEMA, Inc.) to support the completion of the roadmap.

The Energy Commission is hosting this workshop to:

- gather updates since the previous workshop at the California ISO,
- request input on barriers, research needs, and related activities, and
- solicit stakeholder feedback with regard to a draft vehicle-grid integration roadmap outline.

Before this workshop, stakeholders are invited to provide comments on any of the items listed in the Availability of Documents section and posted on the Energy Commission website for this workshop. Stakeholders may make comments before, during and after the workshop as described in the Public Participation section below.

The final Vehicle-Grid Integration Roadmap is expected to be published in early 2014. A draft roadmap document will be available for comment at a follow-up workshop to be held at the California ISO in early November 2013. Stakeholders will have the opportunity to comment on the draft roadmap prior to the California ISO workshop.

The goal of the Vehicle-Grid Integration Roadmap will be to aid vendors, policymakers, and researchers as related technologies are developed and refined in California. The roadmap will guide stakeholders with respect to technology developments, standards, and policies as well as the time frames, barriers, and strategies associated with them.

Public Comment

Oral comments:

Staff will accept oral comments during the workshop. Comments may be limited to 5 minutes per speaker, and any comments may become part of the public record.

Written comments:

Written comments are highly encouraged before the workshop, and may be incorporated into the agenda to facilitate discussions during the workshop. Comments are also accepted after the workshop and should be submitted by 4:00 p.m. on October 15, 2013. Please e-mail your comments to Kiel Pratt at kpratt@energy.ca.gov

In your comment e-mails, please include the following:

- the phrase "Vehicle-Grid Integration Workshop" in the e-mail subject line
- a short title or subject label for your comment, e.g. "Discussion Item 2: Barriers"
- your comment, either as text in the e-mail or as a Microsoft® Word or Adobe® .pdf document
- your name
- your organization if applicable.

Written comments may be posted to the Energy Commission's website before and/or after the workshop. Please note that your written and oral comments, attachments, and associated contact information (e.g. your address, phone, email, etc.) become part of the viewable public record. However, comments submitted by e-mail will be stripped of

contact information prior to being incorporated into any posted document or workshop presentation, unless the sender requests otherwise.

Public Adviser and Other Commission Contacts

The Energy Commission's Public Adviser's Office provides the public assistance in participating in Energy Commission proceedings. If you want information on how to participate in this forum, please contact the Public Adviser's Office at PublicAdviser@energy.ca.gov or (916) 654-4489 (toll free at (800) 822-6228).

If you have a disability and require assistance to participate, please contact Lou Quiroz at lquiroz@energy.ca.gov or (916) 654-5146 at least five days in advance.

Media inquiries should be sent to the Media and Public Communications Office at mediaoffice@energy.ca.gov or (916) 654-4989.

If you have questions about the subject matter of this meeting, please contact Kiel Pratt at kpratt@energy.ca.gov or (916) 327-1412.

Remote Attendance

You may participate in this meeting through WebEx, the Energy Commission's online meeting service. Presentations will appear on your computer screen, and you may listen to audio via your computer or telephone. Please be aware that the meeting may be recorded.

To join a meeting:

VIA COMPUTER: Go to <https://energy.webex.com> and enter the unique meeting number: **928 215 820**. When prompted, enter your name and the following meeting password: **meeting@930**.

The "Join Conference" menu will offer you a choice of audio connections:

1. To call into the meeting: Select "I will call in" and follow the on-screen directions.
2. International Attendees: Click on the "Global call-in number" link.
3. To have WebEx call you: Enter your phone number and click "Call Me."
4. To listen over the computer: If you have a broadband connection, and a headset or a computer microphone and speakers, you may use VoIP (Internet audio) by going to the Audio menu, clicking on "Use Computer Headset," then "Call Using Computer."

VIA TELEPHONE ONLY (no visual presentation): Call 1-866-469-3239 (toll-free in the U.S. and Canada). When prompted, enter the unique meeting number: **928 215 820**. International callers may select their number from <https://energy.webex.com/energy/globalcallin.php>

VIA MOBILE ACCESS: Access to WebEx meetings is now available from your mobile device. To download an app, go to www.webex.com/overview/mobile-meetings.html.

If you have difficulty joining the meeting, please call the WebEx Technical Support number at 1-866-229-3239.

Availability of Documents

Documents and presentations for this meeting will be available online at: www.energy.ca.gov/research/notices/index.html

The following is a partial list of documents expected to be posted online along with this notice. Before the workshop, stakeholders are invited to provide comments with respect to any or all of the discussion items as described in the Public Participation section above. Possible discussion items for the workshop include:

Discussion Item 1: Draft Vehicle-Grid Integration Roadmap Outline

Are the sections in the proposed outline for the Vehicle-Grid Integration Roadmap sufficient for what is necessary to move forward on the roadmap? The intent of the roadmap is to describe the technology and policy/regulatory environment that must be developed to deploy smart charging, and to lay out a pathway for partners to help accelerate this development, including research projects and pilot programs.

Discussion Item 2: Barriers

Please describe the barriers you believe should be considered under the vehicle-integration roadmap. A table is provided to aid in filling out information about the barrier, including a description of the barrier, the context in which the barrier is likely to arise, which stakeholder types are most relevant for resolving the barrier, potential actions to resolve the barrier, methods for taking these actions, and which topics of research, if any, would be needed to overcome the barrier.

Discussion Item 3: Draft Vehicle-Grid Integration Activities

Based on workshops to date, activities listed in the Draft Vehicle-Grid Integration Activities have been identified as potential elements of a vehicle-grid integration roadmap. Please comment on whether these activities are sufficient to move forward on vehicle-grid integration.

Discussion Item 4: Current Activities

Please list current research, development or deployment efforts directly related to vehicle-grid integration (e.g., managed or smart charging). Please provide a description of the activity and identify whether the activity is a research, development, or deployment initiative; whether the project is current, past or planned; what the project

goals are; who the relevant stakeholders are; and what the project milestones and timeline is, was or will be. A table is provided in the Discussion Item 4 document.

Discussion Item 5: Other Initiatives

Please describe other initiatives not directly related to the Vehicle-Grid Integration Roadmap that roadmap stakeholders should be aware of. Please describe initiative content, milestones and stakeholders.

Additional documents planned to be posted:

Workshop Agenda

Summary of feedback gathered in two previous California ISO workshops

Presentation materials for the October 8 workshop

Other backup material as appropriate

Mail Lists: Electricity, EPIC, Research, Transportation, Altfuels