

Agenda for Fourth Annual California Multi-Agency Update on Vehicle-Grid Integration Research

Tuesday, December 5, 2017

Beginning at 9:30 a.m.

CALIFORNIA ENERGY COMMISSION

1516 Ninth Street

First Floor, Rosenfeld Hearing Room

Sacramento, CA

Wheelchair Accessible

Purpose: California Energy Commission staff will lead a public workshop to review the progress of research – called for in the California Vehicle-Grid Integration Roadmap as part of the Governor’s Zero-Emission Vehicle Action Plan – with the goal of accelerating the adoption of plug-in electric vehicles to provide grid services while maintaining driver mobility needs.

Objectives:

- Share current research results with stakeholders and identify potential Vehicle Grid Integration (VGI) synergies or new research opportunities to advance VGI technologies
- Determine the needs to overcome the barriers to accelerating electrification in the medium- and heavy-duty sector
- Solicit feedback from stakeholders, experts, and the public on current and future VGI research and development efforts

Agenda

Time	Item
9:30 a.m. - 9:45 a.m.	<p>WELCOME AND OPENING REMARKS</p> <ul style="list-style-type: none"> ➤ Welcome and Housekeeping <ul style="list-style-type: none"> • Matt Fung, California Energy Commission ➤ Opening Comments <ul style="list-style-type: none"> • Reynaldo Gonzalez, California Energy Commission
9:45 a.m. - 11:45 a.m.	<p>VEHICLE-GRID INTEGRATION (VGI) TECHNICAL RESEARCH INNOVATIONS</p> <ul style="list-style-type: none"> ➤ Advancing Plug-in Electric Vehicle Smart Charging and Demand Management through Interoperable Communication Technologies <ul style="list-style-type: none"> • <i>Next-Generation Grid Communication for Residential PEVs</i> <ul style="list-style-type: none"> ○ John Schott and Craig Rodine, ChargePoint • <i>Smart Charging of Plug-in Vehicles with Driver Engagement for</i>

	<p><i>Demand Management and Participation in Electricity Markets</i></p> <ul style="list-style-type: none"> ○ Doug Black, Lawrence Berkeley National Laboratory • <i>Open Source Platform for Plug-in Electric Vehicle Smart Charging in California</i> <ul style="list-style-type: none"> ○ Tim Lipman, UC Berkeley • <i>Improving Commercial Viability of Fast Charging by Providing Renewable Integration and Grid Services with Integrated Multiple DC Fast Chargers</i> <ul style="list-style-type: none"> ○ Keerthi Ravikkumar, Greenlots <p>➤ Grid Communication Interfaces to Support Vehicle-to-Grid Services</p> <ul style="list-style-type: none"> • <i>Distribution System Aware Vehicle to Grid Services for Improved Grid Stability and Reliability</i> <ul style="list-style-type: none"> ○ Sunil Chhaya, Electric Power Research Institute • <i>Open Vehicle to Building/Microgrid Integration Enabling ZNE and Improved Distribution Grid</i> <ul style="list-style-type: none"> ○ Sunil Chhaya, Electric Power Research Institute <p>➤ Effects of Vehicle-to-Grid Battery Cycling at the Los Angeles Air Force Base Demonstration</p> <ul style="list-style-type: none"> • <i>Vehicle-to-Grid Testing and Demonstration with Department of Defense</i> <ul style="list-style-type: none"> ○ Dan Markiewicz, Concurrent Technologies Corporation
<p>11:45 a.m. - 12:30 p.m.</p>	<p>MEETING UTILITY INFRASTRUCTURE NEEDS THROUGH PILOT PEV CHARGING INTEGRATION</p> <p>➤ On Campus PEV Charging</p> <ul style="list-style-type: none"> • David Goldgraben, San Diego Gas & Electric <p>➤ Charge Ready Demand Response Pilot</p> <ul style="list-style-type: none"> • Mauro Dresti, Southern California Edison <p>➤ Vehicle Grid Integration R&D Update</p> <ul style="list-style-type: none"> • Abigail Tinker, Pacific Gas & Electric <p>➤ Q&A Session</p>
<p>12:30 p.m. - 1:30 p.m.</p>	<p>LUNCH</p>
<p>1:30 p.m. - 2:15 p.m.</p>	<p>DISCUSSION PANEL:</p> <p>➤ Identifying Opportunities and Barriers to Advance Vehicle-Grid Integration into the Medium-/Heavy-Duty Sector</p> <ul style="list-style-type: none"> • <i>Matt Fung (Moderator), California Energy Commission</i>

	<ul style="list-style-type: none"> • Chargepoint • Aerovironment • Proterra • NSI/Bluebird • Antelope Valley Transit Authority • Port of Los Angeles
<p>2:15 p.m. - 3:30 p.m.</p>	<p>FUTURE VGI PLANS FROM THE AGENCIES AND THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR</p> <ul style="list-style-type: none"> • Kiel Pratt and Noel Crisostomo, California Energy Commission • Amy Mesrobian, California Public Utilities Commission • Peter Klauer, California Independent System Operator <p>➤ Q&A Session</p>
<p>3:30 p.m. - 4:00 p.m.</p>	<p>PUBLIC COMMENT</p> <ul style="list-style-type: none"> ➤ Public Comment Session <ul style="list-style-type: none"> • Matt Fung (Moderator), California Energy Commission ➤ Next Steps and Closing Remarks <ul style="list-style-type: none"> • Matt Fung, California Energy Commission ➤ Adjourn