

**Joint Workshop on Plug-In Electric Vehicle (PEV) Infrastructure  
California Energy Commission Staff  
and Statewide PEV Collaborative  
October 19, 2010**

**AGENDA**

- 9:00 a.m. Welcome**  
Commissioner Eggert and Diane Wittenberg-Chair of PEV Collaborative and Tim Olson, Advisor to Commissioner Boyd
- 9:15 a.m. Overview of Key PEV Infrastructure Issues**  
CEC Staff- Peter Ward
- 9:25 a.m. PEV Rollout**  
Nissan- Russell Vare, GM- Alex Keros, BMW- Andreas Klugescheid
- 9:45 a.m. Update on the California Public Utilities Commission's (CPUC) OIR 09-08-009**  
California Public Utilities Commission Staff- Matthew Crosby
- 9:55 a.m. CEC Research Initiatives for PEV infrastructure**  
PIER-Philip Misemer
- 10:05 a.m. Overview of State funded California PEV Infrastructure Projects**  
Awardees: Association of Bay Area Governments-Richard Schorske, Clipper Creek-David Packard, Coulomb-Michael Jones, ECOtality-Donald Karner
- 10:45 a.m. Sales ratios of BEVs to PHEVs and ratios of fleets to consumer sales and their implications for infrastructure needs**  
Southern California Electric Company (SCE)-Robert Graham, National Renewable Energy Labs (NREL)-Tony Markel
- 10:45-11:00 Break**

**Panels on PEV Infrastructure**

- 11:00 a.m. Residential Charging** (Moderators: Peter Ward, Leslie Baroody)  
Nissan-Russell Vare, GM-Alex Keros, ECOtality-Donald Karner, City of San Francisco-Bob Hayden, SCE-Bob Graham, San Diego Gas & Electric Company (SDG&E)-Joel Pointon, Clean Fuels Connection-Enid Joffe)
1. Home charging--Level 1 versus Level 2
    - Choice will depend on size of PEV battery pack. Tradeoffs in cost and smart grid.
    - Home metering options, impact on demand response incentives
    - Utility Notification
  2. Street-side residential charging (for homes without garages)
  3. Multi-dwelling unit charging (refer to PUC rules and assessment of this challenge)
  4. PEV readiness (timely EVSE installation, permitting process, public works guidelines, local planning)
  5. Integrating renewable energy for PEV charging

**12:00 Lunch**

- 1:00 p.m. Workplace and Fleet Charging** (Moderator: NREL-Tony Markel)  
(Panelists: GM-Alex Keros, Coulomb-Michael Jones, SMUD-Bill Boyce, Sonoma County-Dave Head)
1. Need and purpose
  2. Employer and/or land-owner incentives to install EVSE
  3. Coordination of multi-employers on property, and outreach to inform employers of benefits to providing EVSE for employees
  4. Managing on-peak charging
  5. Fleet charging
- 2:00 p.m. Public Charging on Commercial Property (big box stores, etc.)**  
Moderator: Joshua Cunningham)  
(Panelists: GM-Alex Keros, BMW-Andreas Klugesheid, Coulomb-Michael Jones, ECOtality-Donald Karner, Clipper Creek-David Packard, Bay Area Air Quality Management District-Karen Schkolnick)
1. Need and purpose
  2. Business case
  3. Smart charging, embedded metering and managing on-peak charging
  4. Ensuring PEVs have need-based charging priority
  5. Maintenance of chargers and public safety
  6. Integrating renewable energy for PEV charging
  7. Data Collection
- 2:45 p.m.-3:00 p.m. Break**
- 3:00 p.m. Public Charging and Corridor Planning** (Moderator: Tony Markel)  
(Panelists: GM-Alex Keros, BMW-Andreas Klugesheid, ECOtality-Donald Karner, SCE-Bob Graham, PG&E- Dan Bowermaster)
1. Need and purpose for public charging (home vs. public charging ratios, siting criteria, etc)
  2. Data collection (to evaluate utilization of public charging)
  3. Fast Charging (issues to be resolved, optimal placement, frequency and signage)
  4. Business case for public infrastructure and encouraging private sector investments
  5. Smart charging and integrating renewable energy
  6. Americans with Disabilities Act requirements
- 4:00 p.m. Public Comment**
- 4:30 p.m. Concluding Remarks**