

SB350 Transportation Electrification Workshop



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Overview – Accelerate Widespread Transportation Electrification

Address state goals and policies through a Balanced, Public-Private Partnership, while also efficiently integrating transportation electrification loads with the grid

- 1) Focus on goals and guiding principles** – flexible and expedient regulatory framework where utility proposals address customer-specific needs and technology solutions
- 2) Provide funding certainty** – 3 to 5 year programs signals the market and creates certainty, encouraging competition, innovation and investment
- 3) Optimize use of grid** – provide benefits to ratepayers by integrating renewable energy resources and improving grid utilization through rate designs, utility infrastructure and technology solutions
- 4) Consider a “customer-led” approach**

1) Focus on Goals and Guiding Principles

Commission's guidance should focus on goals and guiding principles

- Priorities should be based on near-term and long-term cost-effective opportunities that meet the objectives of SB350
- Utility proposals will address customer-specific needs and technology solutions
- Allow utility proposals to explore
 - Specific transportation segment solutions
 - Resources to help customers overcome adoption barriers and seize opportunities
 - Comprehensive educational responsibilities with all stakeholders

2) Provide Program Funding Certainty

A 3 to 5 year program horizon provides certainty and minimizes investment risk

- Fits well with commercial customer business planning cycles
- Allows programs to leverage all diverse funding resources
- Accommodates customers who are required to competitively bid out projects
 - Encourages cost competitiveness
 - Stimulates innovation
 - Attracts investment
- Provides lead time for the market to ramp-up, helping those who may not be able to immediately take advantage of today's opportunities

3) Grid Optimization

The efficient integration of transportation electrification loads with the grid provides net benefits to all ratepayers

- Avoids capital improvements to the system and fossil fueled power plants
- Integration of renewable energy resources, and improved utilization of the grid by moving loads to off-peak hours of the day

Utility proposals should explore

- Innovative rate designs
- Load management automation – enabling technology solutions
- Utility infrastructure engineering designs and metering options
- Additional ways to the minimize initial and operating costs to customers

Explore Innovative Rate Designs – Examples

EV Rate and Technology Study (2011 to 2013) – Impact of 3 experimental EV rates

- TOU prices incentivize EV drivers to shift loads to off-peak hours

Vehicle-Grid Integration (VGI Pilot Program) Rate (Decision 16-01-045)

- Pilot features a day-ahead hourly rate reflecting grid conditions and the cost of energy

Residential Pilot Rate 3 (Approved February 2016)

- Day-ahead hourly rate reflecting grid conditions and the cost of energy available to residential pilot participants (includes a \$10/month fixed charge)

2016 GRC Phase II Proposed Rate (Filed Dec 2015)

- TOU period proposal including proposed Super Off-Peak period for all customers
- A C&I cost-based rate option with distribution demand charges recovered through a modified non-coincident demand charge which includes an exemption for demand during super Off-Peak period

4) Consider a “Customer-Led” Approach

Customer needs are unique and varied – proposals should include customer buy-in

- Total cost of ownership focused, and technology agnostic
- Operational requirements alone lack load-shifting incentives to customers
 - Rate design with enabling technology
 - Transportation options, including battery ownership models
- Resources to help customers overcome adoption barriers and seize opportunities
 - Expertise and funding to help identify and apply for relevant grant opportunities
 - Utility resources to assist with total cost of ownership analysis
 - Help commercial customers broker their Low Carbon Fuel Standard credits
 - Targeted, comprehensive education programs

Conclusion – Accelerate Widespread Transportation Electrification

Address state goals and policies through a Balanced, Public-Private Partnership, while also efficiently integrating transportation electrification loads with the grid

SDG&E's responsibilities include

- Obligation to serve and a responsibility to collaborate
- Full accountability for delivering reliable service and benefits to all ratepayers
- Exploring opportunities with all customer segments
- “Learn by Doing”