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IEPR Workshop

Sara Rafalson | Senior Director, Market Development
June 24, 2020
Agenda

About EVgo
California Impact
NRG Settlement
California Funding Sources
DCFC Cost Stack
Grid Impacts
America’s Largest Public Fast Charging Network

We build, own, & operate the nation’s largest network of public DC fast chargers

80% of Californians live within a 15 minute drive of an EVgo charger

200,000+ customers

Over 800 fast charging locations nationwide

98% charger uptime rate

75 million+ electric vehicle miles annually, 1/3 from fleets
EVgo COVID Care Plan Supports 950+ EV-Driving Essential Workers

EVgo COVID Care customer Michelle Hammond is supporting essential workers in her South Pasadena community with food delivery, powered by EVgo fast charging.
EVgo Grew CA Public Fast Chargers 40% in 2019

Strong Statewide Policy Support, Rate Reform Yields Rapid EVSE Deployment
Delivered through the Settlement:

- ~530 DCFC delivered to date, nearly double initial compliance target due to cost efficiencies
- Amendment to allow high power charging plazas in dense urban areas to serve MUD segment
- ~7,000 make ready stubs for L2
- Opened 1st operational 350kW charging station in Baker, CA
- Opened Green Raiteros Headquarters + Equal Access Charging Hubs with CBO partners
- Battery storage pilots
Investing in Priority Populations

Existing

• 40% of sites operating in Low-Income Communities
• 20% of sites operating in Disadvantaged Communities

Under Construction

• 55% of sites operating in Low-Income Communities
• 22% of sites operating in Disadvantaged Communities

Low-income definitions per Assembly Bill (AB) 1550 (Gomez, Chapter 369, Statutes of 2016)
Disadvantaged Communities as defined by (SB) 535 (De León, Chapter 830, Statutes of 2012)
Other Funding Programs: CPUC Activity

Source: CPUC TEF Workshops
Best Practices from Other Funding Programs

• BAAQMD
  • **Utilization targets** weed out speculative applicants, encourage deployment of chargers with highest air quality benefits
  • **Public Availability**: Charging stations must be available to the general public, operate for a minimum of 3 years, and achieve a minimum usage requirement. All funded charging stations must be available for use by the general public at least 250 days per year, for at least 8 hours per day during normal business hours with the exception of MDU facilities which are subject to case-by-case projects

• LADWP
  • Complete the EV Charging Station Request Forum found at ladwp.com/ev and work with LADWP to ensure that the utility infrastructure is sized for the incremental load resulting from your planned deployment. You will need to obtain a Service Commitment Letter or EV Service Design Engineering Review Confirmation issued by LADWP in connection with the planned deployment **before applying.**
DCFC Cost Stack: Much More than Electricity

DCFC MAJOR COST CATEGORIES

Table 1: Illustrative List of Public Fast Charging Cost Components by Category

<table>
<thead>
<tr>
<th>Equipment Costs</th>
<th>Developmental Costs</th>
<th>Operation Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charger Hardware</td>
<td>Network Design</td>
<td>Electricity / RECs</td>
</tr>
<tr>
<td>Utility Interconnect (e.g. switchgear, conduit)</td>
<td>Site Development</td>
<td>Rent*</td>
</tr>
<tr>
<td>Software</td>
<td>Legal Contracts</td>
<td>Warranties</td>
</tr>
<tr>
<td>Credit Card Reader</td>
<td>Site Surveys</td>
<td>Maintenance</td>
</tr>
<tr>
<td>Communications Hardware</td>
<td>Engineering</td>
<td>Charger Communications</td>
</tr>
<tr>
<td>Wheel Stops</td>
<td>Utility Review</td>
<td>Customer Care/Call Center</td>
</tr>
<tr>
<td>Signage</td>
<td>Permitting</td>
<td>Network Operations / Billing</td>
</tr>
<tr>
<td>Security</td>
<td>Construction (e.g. boring, trenching)</td>
<td>Taxes &amp; Business Licenses</td>
</tr>
<tr>
<td>Additional Technology Tools</td>
<td>Bollards, Pads &amp; ADA</td>
<td>Insurance</td>
</tr>
<tr>
<td>Utility Service Upgrade*</td>
<td>Project Management</td>
<td>Web/App/Digital Services</td>
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*situation-specific: required sometimes but not always
DCFC Cost Stack: Much More than Electricity

**EQUIPMENT COSTS**

- Charger Hardware: 84%
- Interconnection: 12%
- Network Design, Site Dev, Legal: 12%
- Engineering Design: 7%
- Software: 4%

**DEVELOPMENT COSTS**

- Construction: 81%
- Civil (ADA, Bollards, Pads): 13%
- Electrical labor: 4%
- Trenching/boring: 4%
- Project Mgmt: 5%
- Civil Upgrade for Utility Connection: 55%
DCFC Cost Stack: Much More than Electricity
Grid Benefits: DCFC Charging Avoids GWh of Solar Curtailment

DCFC is solar-friendly load

- >45% of Rideshare charging, personal use charging during 9AM-3PM solar hours
- Personal use drivers drive ~75% of time between 9-6
- Alignment without price signals
Questions?

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