

REFUEL: SAN DIEGO REGIONAL ALTERNATIVE FUEL COORDINATING COUNCIL

ELECTRIC SUBCOMMITTEE MEETING

OCTOBER 15, 2015

AUGUST 28, 2015 MEETING SUMMARY

File number 3200900

1. UPDATES FROM MEMBERS

City of San Diego

Jacques Chirazi (City of San Diego) highlighted current City of San Diego efforts: a Car Share Program, a California Energy Commission (Energy Commission) project for Electric Vehicle Charging Station (EVCS) installations, and a California Air Resources Board (ARB) project in partnership with SANDAG that focuses on disadvantaged communities.

Car Share Program

Mr. Chirazi explained the City of San Diego's (City) Car Share Program (Program) and changes to parking regulations. The City has had a project with Car2Go for three years and is in the process of formalizing it. Mr. Chirazi mentioned changes being made to parking regulations that will allow electric vehicle (EV) drivers to park at designated two hours or more metered spaces for free after the metered hourly parking rate has expired. Mr. Chirazi added that there will be enforced, dedicated parking spaces for car sharing vehicles. He shared "EVCS zones" will be created with signage allowing only EV parking for actively charging vehicles; certain sites will have restrictions on charging times. Mr. Chirazi mentioned that the City went to Council in July and received approval on August 17 of this year; the Program will take effect at the end of September. The City would be introducing two additional car share vendors to the Program and will be providing a list of vendors that will offer a mix of alternative fuels at certain locations.

Energy Commission EVCS Installations

With Energy Commission funding, the City will install 41 charging stations with OpConnect who would determine charging costs for EV owners. Many of the sites will be recreation centers, including the Mission Bay Aquatic Center, and on-street locations. Installation locations were selected using previous work done through the EV Project. Mr. Chirazi added that the City has renewed its contract with Blink Network.

Car Sharing Program for Disadvantage Communities

The City has been collaborating with the San Diego Association of Governments (SANDAG) on an ARB project that will provide car share services and potentially electric vehicle charging stations (EVCS) in disadvantaged communities (DAC). The project is intended to create an interest in the EV market and an incentivize EV car sharing usage and access in the community of Barrio Logan. The City expects to launch the vehicles in September of this year, with heavy engagement from the

community to better understand their transportation needs to ensure the car share program is beneficial.

COUNTY OF SAN DIEGO

Brad Northrup (County of San Diego) shared information about the County of San Diego's (County) Plug-In Motorpool Pilot Project and information about a recent conference that the County attended.

Motorpool Pilot Project

The Motorpool Pilot Project (Project) provides mobile car sharing/motorpool vehicles for County employees at the Operations Center. There will be capacity for 50 EVCS in the fleet garage, with a minimum of eight stations required for the Project.

Envision Solar Update

The County attended a government fleet technology conference and shared news about a local San Diego company, Envision Solar. Envision Solar was awarded a one-year contract, with two one-year extensions to supply Caltrans with 11 EV ARC solar powered EV chargers.

The sub-committee discussed the Envision EV ARC that was put up in the San Diego International Airport's cell phone lot and the costs associated with the system. Mr. Chirazi mentioned that the price range is \$40,000-\$60,000 depending on the battery size. There was mention of pitfalls of the Envision EV Arc for public use, like the need for back-up grid power.

2. PLUG-IN SD PROGRAM

Allison Wood (SANDAG) introduced Plug-In San Diego (Plug-In SD), an Energy Commission funded program that will offer technical services to local agencies in the San Diego region. Plug-In SD will focus on implementing the PEV Readiness Plan developed with the San Diego Regional Electric Vehicle Infrastructure (REVI) working group. Plug-In SD will provide an EV expert to the region, host subregional workshops for local permitting and inspection staff, develop a checklist for contractors, provide information to multi-unit dwelling (MUD) building owners, and increased PEV awareness among consumers.

Kevin Wood (Center for Sustainable Energy) mentioned leveraging Refuel EV activities to support Plug-In SD discussions. Plug-In SD will leverage Refuel to further EV discussions and will coordinate with San Diego Gas & Electric (SDG&E) on their VGI proposal once it is through the California Public Utilities Commission (CPUC).

3. TOOLKIT PRESENTATION & DISCUSSION

Jessica Jinn (CSE) presented components of the EV toolkit. Each toolkit has a coversheet that provides an overview of electricity, EVs, and charging. Ms. Jinn asked the subcommittee for input on the toolkit components. She requested that the group provide feedback on which barriers have been resolved, are still an issue, and any new barriers that should be addressed.

INPUT ON TOOLKITS FROM SUBCOMMITTEE MEMBERS:

Comments on the fleet component of the toolkit:

- Include a pop-out box showing the type of location (retail shops, etc.) on the “Map of Public Plug-in Electric Vehicle (PEV) Charging Stations in San Diego Region”.
- Add the Hybrid Truck & Bus Voucher Incentive Project (HVIP) to the Incentives sheet.
- Ms. Jinn asked for fleet case studies:
 - Mr. Northrup mentioned that Sonoma County and the City of Sacramento have fleet case studies. He added that the City of Sacramento has numerous light-duty vehicles and is working on an all-electric trash truck demonstration project.

Comments on the public agency component of the toolkit:

- Add a comparison to the Envision EV ARC portable system; include mention of the placement of the charging station and various options of siting a station.
- Add the dates to all reports.
- Add vendors and what prices they are offering (types of business models).

General comments on the toolkit:

- Add a chart on how to reach the state goal of 1.5 million ZEVs.
- Add a gallon equivalent for gas on the chart on page 1. Include a reference to the cents/kWh or gasoline equivalent at x/kwh/hr.
- Under the “Permitting Section for Charging Station Components”, revise the listing to be more generic (NRTL) as opposed to UL listing.
- On Page 1, correct the statement about DCFC to: “Some EVs can charge up to...”
- Anna Lowe (SANDAG) suggested making reference to vendors active in their region and to reach out to the City of San Diego or County of San Diego for points of reference.
- Mr. Chirazi suggested adding in other costs pertaining to the protection of EVCS (e.g. bollards and wheel stops).
- Joel Pointon (JRP Charge) mentioned an extended warranty fee from network providers which can be just as expensive as the base service cost. Electric Vehicle Service Providers (EVSP) are offering ancillary fees for warranties.
- Ms. Wood suggested a section that combines EV charging with storage or solar. She also suggested the addition of a map using Clean Vehicle Rebate Project (CVRP) data.

Ms. Jinn and Ms. Lowe reminded members to send in any additional comments and that there will be opportunities for 1-on-1 outreach on the toolkits with municipal staff for those interested.

CSE and the Advanced Transportation Center (ATC) will be hosting a webinar about how to use tools related to CVRP.

4. OPEN DISCUSSION

- Helmut Igel (M-Beam Project) spoke about a modular battery system and a project that UCSD students are working on that will allow drivers to use battery exchange stations while traveling. Batteries are placed in parallel and would allow for more flexibility.
- Tom Bartley (Tom Bartley Ideas) suggested a case study on combining solar and EV charging at home and their cost savings.
- The subcommittee discussed future flexible charging stations, noting the longevity of the underlying wires.

- Mr. Chirazi mentioned that the City of San Diego has asked its contractor to install larger conduit when possible to allow for more flexibility in the future.
- Randy Schimka (SDG&E) talked about the Sub-Metering Pilot Program (Program) overseen by SDG&E. Currently, 12 residential EV customers have signed up for the Program and the study will last 12 months. Mr. Schimka reminded the subcommittee that Tiers' 3 and 4 will be rolled into a single tier after September 1, 2015.
- Mr. Pointon spoke about the Drive the Dream event hosted by the Plug-In Electric Vehicle Collaborative (PEVC) on October 15, 2015 from 9 a.m.- 2 p.m. in Los Angeles as a potential venue for publicizing the public agency toolkits. The event is PEVC's annual event with a primary focus on workplace charging, with a secondary emphasis on MUDs, and current statewide efforts. Governor Brown will be in attendance and a large number of private corporations and public agencies have been invited.
- Mr. Wood shared that National Drive Electric Week is September 12-20, 2015. The San Diego event for Electric Vehicle Day is on September 19, 2015 from 10 a.m.- 3 p.m. at Liberty Station and is free and open to the public.

Attendees/Call-in Participants:

- Tom Bartley – Tom Bartley Ideas
- Jacques Chirazi – City of San Diego
- Candace Chu – Center for Sustainable Energy (CSE)
- Mike Evans – San Diego County Chamber of Commerce
- Helmut Igel – M-Beam Technologies
- Jessica Jinn – CSE
- Stephen Kapp – San Diego County Office of Education
- Barbara Locci – City of Chula Vista
- Anna Lowe – San Diego Association of Governments (SANDAG)
- Michelle Martinez – SANDAG
- Brad Northrup – County of San Diego
- Britney Olsen – Car2Go
- Dave Peiser – Encinitas EcoFest
- Joel Pointon – JRP Charge
- Brendan Reed – San Diego County Regional Airport Authority
- Colin Santulli – CSE
- Randy Schimka – San Diego Gas & Electric
- Allison Wood – SANDAG
- Kevin Wood – San Diego Regional Clean Cities Coalition