

REFUEL: SAN DIEGO REGIONAL ALTERNATIVE FUEL COORDINATING COUNCIL

ELECTRIC SUBCOMMITTEE MEETING

JANUARY 15, 2015

NOVEMBER 19, 2014 MEETING MINUTES

File number 3200900

1. WELCOME AND INTRODUCTIONS

Anna Lowe (SANDAG) called the meeting to order at 9:06 a.m. Ms. Lowe provided an overview on the San Diego Regional Alternative Fuel Coordinating Council (Refuel) and the goal of the Electric Subcommittee. She mentioned that with the establishment of Refuel, a main task of the San Diego Regional Alternative Fuel Readiness Project is complete. Refuel will help guide and shape the products of this project, and each alternative fuel subcommittees will devote further attention to each fuel.

The aims of the Electric Subcommittee are to continue conversations held during and after the San Diego Regional Electric Vehicle Infrastructure Working Group (REVI) and address the current barriers to electric vehicle (EV) infrastructure development. REVI facilitated in developing the San Diego Regional Plug-In Electric Vehicle Readiness Plan (PEV Readiness Plan), which was completed January 2014.

REPORTS

2. REVI: ELECTRIC INFRASTRUCTURE BARRIERS (INFORMATION)

Ms. Lowe discussed EV barriers established by REVI, included in the PEV Readiness Plan. REVI generated a barriers table with 11 barriers to EV adoption and infrastructure deployment. Ms. Lowe will send out the barriers table to the group. She requested that the group review the table and provide feedback on which barriers have been resolved, are still an issue, and any new barriers that Refuel should address.

3. REGIONAL INFRASTRUCTURE UPDATES SINCE REVI (INFORMATION)

Kevin Wood (San Diego Regional Clean Cities Coalition (SDRCCC)) presented data and GIS maps on the EV infrastructure growth since the conclusion of REVI. Based on the listing from the Department of Energy Alternative Fuel Data Center (AFDC), from December 2013 to November 2014 the following additional chargers were developed: 12 Level 1, 64 Level 2, and 3 DC Fast.

Refuel members had the following questions and comments:

- Andy Hoskinson (NRG EvGo) denoted that when determining where stations should be placed, a path of travel analysis is important especially for DC Fast chargers (DCFC). Mr. Hoskinson stressed a ratio of charger types to vehicles to track the building and installing of charging stations, so as to not overbuild or under build.
- Mike Evans (San Diego Regional Chamber of Commerce) mentioned that an infrastructure analysis involving EV implementation and adoption rates should be taken into account.

- Susan Freed (County of San Diego) spoke on a grant the County received to place electric infrastructure at ten sites. Ms. Freed added that the County's partnership with its manufacturer could be a good model for local governments to follow. Ms. Lowe inquired if the County could give presentation/discussion on logic, benefits, progress, and lessons learned. Ms. Freed agreed and this talk will take place early 2015.
- Mr. Hoskinson brought to the attention of the subcommittee that installation of combo SAE DC fast chargers in the region will be completed by the end of 2014. Although product constraint is seen as a barrier to quicker installation, there is a charging station in Fenton Market Place in Mission Valley which will have this combo and be made public by early December 2014.
- Allison Wood (SANDAG) shared that SANDAG is starting to look at work that has been done in the Bay Area dealing with alternative fuel infrastructure/implementation in order to replicate processes and results for this region. When a thorough analysis of this work is completed it will be brought to the Refuel group.
- Ms. Lowe commented that there should be conversations on the value of Level 1 chargers. She recommended that these types be considered as well if they are a valuable option.
- Jacques Chirazi (City of San Diego) explained that workplace Level 1 charging would be cost effective, and many could look into DCFC as a reserve. He felt that areas of focus would be those that are lacking in infrastructure and have fewer EVs, explaining that if people see this infrastructure, they might be willing to explore EV purchasing. Mr. Chirazi added that many might be concerned with its rate structure. EV owners would want to know the best times to charge and how to get the best value for their money.
- Jeff Wyner (City of Escondido) emphasized the need to think about the placement of the meter in order to compliment future conduit implementation. Mr. Evans responded that those installing EV infrastructure would need to make sure conduits are sufficient for future use.
- Ms. Freed asked how cities accurately predict what they will need in the future. Mr. Chirazi said that many are overbuilding to adjust for the future.
- Mr. Hoskinson mentioned that there is a new National Electrical Code (NEC) code regarding automatic load management which can have positive effects on future infrastructure. He explained that EVs are growing at a strong rate, and now could be an appropriate time to codify building development and infrastructure.
- Ms. Lowe shared that Climate Action Plans (CAPs) are becoming more commonplace, and these are pushing many conversations geared towards alternative fuels which can encourage policy.

4. LAWS AND REGULATIONS (INFORMATION)

Mr. Wood discussed current laws and regulations pertaining to alternative fuel and infrastructure.

- Senate Bill 1275, "Charge Ahead California", gives preference to PEV installation in disadvantaged communities. This will also help achieve the Governor's goal of one million EVs on the road by 2020.

- Senate Bill 880 “Common Interest Developments: EV Charging Stations” of 2013, affirms the right of residents in multi-unit dwellings (MuD) to have access to charging, without unreasonable restrictions from the Home Owner’s Association (HOA).
- Assembly Bill 2565, “Rental Property: EV Charging Stations”, reserves the right for renters to ask for installation of charging infrastructure, at residents cost; if this is not met, the lease on the place of residence can be broken.
- Assembly Bill 2414, “Parking Facilities: EV Charging”, provides free charging as a reasonable gift of public funds.
- Assembly Bill 1092, “Building Standards: EV Charging Infrastructure”, asks for the next update to Title 24 to have mandatory prewiring for three to five percent of all systems.

Mr. Wood encouraged the development of a one page document discussing AB 1092. If this bill becomes mandatory, the document created can facilitate earlier conversations.

5. CALIFORNIA ENERGY COMMISSION FUNDING (INFORMATION)

Ms. Wood informed Refuel that on November 17, 2014, the Energy Commission sent out a notice of proposed awards and SANDAG, in partnership with CSE, received an award for implementation of the PEV readiness plan developed through REVI. There are activities that must be met, and these include hosting sub-regional workshops for staff within permitting and inspection processes, having an EV expert in the region to assist agency on installation process, development of a checklist for the contractor community, citing for installation of charging stations, providing information to MuD, and information sessions on PEV awareness for consumers.

The total funding amount that was awarded was \$300,000 over a two year period. This work will start in mid-2015 and Ms. Wood would like to use this subcommittee and Refuel to help guide these activities.

Refuel members had the following questions and comments:

- Ms. Freed suggested that a web tool be created to help local governments to determine whether a site is a good opportunity to install infrastructure.
- Mr. Hoskinson emphasized there are no maps for cities to project anticipated infrastructure, but cities can add a conduit which is an inexpensive alternative. He supported the creation of toolkits from each subcommittee in order to provide guidance to cities regarding each alternative fuel type.
- Mr. Wood voiced his curiosity on how much cities have used the Plug-In Electric Vehicle (PEV) Readiness Plan. He agreed that having a toolkit with a table depicting easy targets would be of more use than a lengthier document.
- Ms. Lowe encouraged the revisiting of a citing map for infrastructure. Also, it was added that having a clear understanding on which technologies would not interfere with cameras would be beneficial.

6. SUBCOMMITTEE OPEN DISCUSSION (DISCUSSION)

- Mr. Wood informed Refuel that in early 2015 about \$10 to \$15 million of Energy Commission funding will have similar terms and conditions, and goals as last the round of funding. Many projected projects include DCFC corridor infrastructure, Level 2 destination charging, workplace and multi-unit charging.
- It was mentioned that the Energy Commission is putting funding towards loan loss reserve financing programs for non-public agencies. This financing program will be available by the second quarter of 2015. It is important to note that the money is subject to private lenders requirements, but can be used to match other projects that have funding.
- The want for OEM's like BMW, KIA, and Nissan to be present at future electric subcommittee meetings was stressed.
- Ms. Freed shared concerns with the cost of implementing EV infrastructure to existing sites. She mentioned that projects are costing more than previously thought, and feels that additional funding would be required to finance projects. She inquired if there was more that could be done with temporary fixes.
- Nick Cormier (San Diego County Air Pollution Control District (SDAPCD)) suggested PV to EV charging infrastructure because they are movable and can be rented. He felt that it can be an interesting solution to these challenges and is worth having a conversation about.
- Another area of concern proposed by Ms. Freed was time of use rates. She emphasized energy storage as a good option in times when demand should be cut.
- Mike Carella (GreenChargeNetworks) provided information on energy storage. He mentioned that the cost of shifting loads from expensive to non-expensive can be offset. He shared that GreenChargeNetworks can come and offset the cost, and help with building of infrastructure.
- Mr. Hoskinson mentioned that demand charges can be very expensive, averaging a few thousand a month even if less than ten people use the infrastructure. He emphasized that energy storage is a critical element to EV charging, especially in regards to DCFC.

7. PEVC: PLUG-IN ELECTRIC VEHICLE COLLABORATIVE (INFORMATION)

Mr. Wood shared information on the Plug-In Electric Vehicle Collaborative (PEVC). The PEVC is a public/private organization accelerating the adoption of plug-in electric vehicles to meet California's economic, energy and environmental goals. The PEVC is currently working on documenting MuD case studies and furthering outreach and education for MuD and workplace charging through 2015. Future PEVC activity includes Drive the Dream 2015, an event to accelerate corporate commitments to workplace charging. The Collaborative is also active on statewide policy issues in order to draft guidance coming out of the state. Toolkits that come out of Refuel should reference these materials, local context, and clear guidance into action for local governments to take.

8. BARRIERS AND TOPICS FOR NEXT MEETING (DISCUSSION)

Ms. Lowe encouraged the EV subcommittee to identify barriers that can be addressed in its toolkit. The following barriers were addressed:

- Use citing to update maps of current infrastructure to show where locations are, identify gaps, and determine if Level 1 chargers are adequate for workplace charging.
- Identify underserved communities and challenges to increasing EV numbers in these areas. Keep in mind that leased electric vehicles are becoming a cheaper alternative.
- Address government fleet issues of vetting and purchasing vehicles. Explore the possibility of EV ride sharing for government fleets until EVs can be widely adopted.
- Increase alternative fuel adoption and acknowledge barriers of purchasing alternative fuel vehicles for consumers. Address what this subcommittee and EV dealers can do to this. Bring car dealers into the conversation to see how they are pushing these cars would be beneficial
- Educating salespeople on the value of EVs and how to market them. Stress that previously leased EVs are becoming less expensive to prospective owners.

9. UPCOMING MEETINGS

Ms. Lowe informed the electric subcommittee that materials from the meeting will be sent by email and posted onto the Refuel websites between meetings. A general assessment and survey will be created in December, and be distributed to cities soon after.

The next Refuel Coordinating Council will be held on Thursday, January 15, 2015 from 1:00-3:00 pm, and the next electric subcommittee meeting will be held in March 2015.

Attendees

- Mike Carella – Green Charge Network
- Jacques Chirazi – City of San Diego
- Nick Cormier – San Diego APCD
- Mike Evans – San Diego Regional Chamber of Commerce
- Susan Freed – County of San Diego
- Andy Hoskinson – NRG EvGo
- Brendan Reed – City of Chula Vista
- Bryce Wilson - City of Encinitas
- Jeff Wyner – City of Escondido
- Anna Lowe – SANDAG
- Michelle Martinez - SANDAG
- Allison Wood – SANDAG
- Kevin Wood – San Diego Regional Clean Cities Coalition