Electric Vehicle Charging Association Questions for Byron Washom, Director of Strategic Energy Initiatives At University of California, San Diego

From Mr. Washom:

We currently dispense over 77 MWH per month to approximately 1200 unique EV drivers to campus per month. Our growth rate is 8% per MONTH in both MWH dispensed and unique EV Drivers.

The replies below are from the perspective of our leadership role in Electrification of Transportation. Our 3 DCFC EVgo ports with EVgo are integrated with PV and 2nd Life EV batteries to mitigate peak load impacts, and it won the 2016 Energy Storage North America (ESNA) Outstanding Mobility Award. The Nuvve Vehicle-to-Grid project site hosted by UCSD won the 2018 ESNA award. Plug in America named UCSD in 2018 its first recipient of "Outstanding Organization" for its significant contribution to the EV movement in areas including technology development, policy/advocacy and education/outreach. GreenTech Media in 2017 named UCSD as its first university to be recognized as "GridEdge Innovator Award" for its electrification of transportation efforts.

1. How many public charging stations are on the UCSD campus?

We have 182 UCSD owned and operated Level II ports and 4 DCFCs that are all publicly accessible. We have an additional 28 ports that are prototypes and restricted to the research participants.

2. Are you aware of the split between student and faculty usage of the EVSE?

Due to privacy limitations, we do not have the ability to differentiate between faculty/staff and students. However, we have 20 (11%) Level II ports at our graduate student housing and another 24 will be operational in the next 6 months.

3. Do you have any stats regarding what percentage of your EVSE users are moderate or low income?

We have the ability to determine the zip code of our ChargePoint customers, and approximate 20% of our public and commuter unique customers are from moderate or low income zip codes. As the largest single employer in San Diego, our employees are from all income levels. Approximately 2000 of our employees are from DAC's rated as >70%, and they are an emphasis for our EV affordability and accessibility campaign.

4. Is there a fee associated with using these charging stations? If so, what is it?

The on campus EV ports charge at flat fee of \$.15/kWh. Weekday hourly parking fees are assessed on the public visitors without a UCSD parking permit. The Weekday evenings and all Weekend hours are free public parking.

5. Do these charging stations enable credit transactions at the station or through a 1-800 number? If so, how many transactions in the past year were made using a credit card?

All public chargers have 1-800 number credit card authorization. The only data on 1-800 activity for our public accessible charging is associated with the ChargePoint ports. During the past 12 months, we had 45,250 such charging sessions, and only 353, or 0.8%, were credit card transactions. We know this to be accurate since that is the count of the Unique Driver ID # being tagged as a "null", but a charging transaction occurred just the same. All other charging sessions had a unique ChargePoint ID # associated to it.

6. In your experience, is a credit card reader on a charging station necessary for accessing the station?

As a large, owner of publicly accessible EV charging stations adjacent to the major Long Distance Corridor I5, I find the need to equip EV charging stations as totally unnecessary with existing payment technology as long as the network provider has a 24x7 customer service that can take either a credit OR debit card for a single charging event that represents less than <1% of our annual transactions. When one considers the evolving cellular technology for secure payment systems and emerging interoperability protocol, it becomes even more unnecessary. Finally, as a large site host, customer service through reliability of the operating ports is imperative for customer retention, a card reader exposed to the environmental elements represent just one more potential cause of equipment failure.