

ED DATA REQUEST
ED-SDG&E-DR-03
SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)
SDG&E RESPONSE
DATE RECEIVED: June 13, 2017
DATE RESPONDED: June 27, 2017

DATA REQUEST

Date: June 13, 2017

Response Due: June 27, 2017

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Please provide answers to the following questions. In light of the Prehearing Conference held on March 16, 2017, the Administrative Law Judge may instruct SDG&E to formally file their Data Responses.

Priority Review: Electrify Local Highways

1. In response to Energy Division's questions during the May 17 Priority Review workshop about the Oceanside Transit Center, SDG&E stated the site currently has 10 Blink charging stations but many of them are inoperable.
 - a. How long were the existing EVSEs in place? How much of that time have the majority been inoperable?

SDG&E Response:

The existing Blink EVSEs have been in service since March 2012. SDG&E doesn't have operational data on the charging stations, but from looking at

ED DATA REQUEST
ED-SDG&E-DR-03
SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)
SDG&E RESPONSE
DATE RECEIVED: June 13, 2017
DATE RESPONDED: June 27, 2017

comments on the Plugshare website, it appears that the first issues began in 2014, and there are reports from 2015 onward about the stations not working at various times.

- b. Has Caltrans, the Car Charging Group, or SDG&E collected any data from these charging stations?

SDG&E Response:

Caltrans and SDG&E don't have access to any data from the charging stations. The Car Charging Group took over operation of the stations in late 2013. SDG&E assumes that they have data on the stations after that date.

- c. Will SDG&E be able to utilize the solar canopy as part of its EVSE installation at the Oceanside Transit Center?

SDG&E Response:

SDG&E will be able to use the solar canopy to provide shade for the new charging stations, but the electrical output of the solar canopy belongs to North County Transit District and helps to lower their electrical bill at the facility where it is installed.

- i. If so, how would it utilize the solar canopy?

SDG&E Response:

See above response.

- ii. If not, why not?

**ED DATA REQUEST
ED-SDG&E-DR-03
SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)
SDG&E RESPONSE
DATE RECEIVED: June 13, 2017
DATE RESPONDED: June 27, 2017**

SDG&E Response:

See above response.

2. SDG&E provided data from the Del Lago Park and Ride in its response to Energy Division's data request 1 that showed the majority of charging occurred at the site's fast chargers, rather than the level 2 chargers.
 - a. Is this because the L2 charging equipment is largely inoperable or is there some other explanation?

SDG&E Response:

SDG&E doesn't know what caused the differences between the energy dispensed for L2 charging and DC Fast charging at the Del Lago site.

3. During the May 17, 2017 workshop on priority review projects, SDG&E mentioned that it partnered with ECotality at the Del Lago Park and Ride with solar and storage. Please provide any reports or lessons learned from the data collected at this site, including any lessons learned related to the onsite solar and storage.

SDG&E Response:

SDG&E partnered with Caltrans and ECotality on the Del Lago Park and Ride project. Caltrans was planning to renovate Del Lago, and wanted to install the first Park and Ride EV charging stations in the region. Caltrans provided a renovated and graded parking area for the charging stations, and allowed access for construction and ongoing maintenance. ECotality provided the Level 2 and DC Fast charging equipment and installation, and SDG&E provided and installed a solar canopy that would cover the charging stations and parking places and helped to provide and installed an on-site energy storage system and associated switchgear and metering.

SDG&E installed a 13 kW solar PV system, as well as a 200 kW / 400 kWh energy storage system at the Del Lago site.

ED DATA REQUEST
ED-SDG&E-DR-03
SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)
SDG&E RESPONSE
DATE RECEIVED: June 13, 2017
DATE RESPONDED: June 27, 2017

Attached is the SDG&E drawing package for the Del Lago project (filename: SDGE Del Lago Design Drawing.pdf).

Attached is a 12 month to date production report for the solar PV system (filename: Del Lago Solar PV Production June 2017.xls).

Attached is a description of the Optimized Pricing and Resource Allocation (“OPRA”) project that incorporated the energy storage system (filename: OPRA Project Details.pdf).

Notes and lessons learned about the on-site solar and energy storage:

- All equipment is AC connected (no DC to DC connectivity).
- Installing EV charging, solar PV generation, and energy storage in the same location requires separate metering (EV charging metered separately and billed to 3rd party, energy storage integrated into CAISO energy market with separate metering).
- The solar canopy is comprised of tested / proven technology and has worked well (see production spreadsheet).
- The solar canopy has provided valuable shade for EV drivers as well as the charging stations. Weathering effects on the charging stations covered by the canopy have been minimized.
- The cost to integrate aggregated smaller DERs with the CAISO can’t be offset from participating in the markets alone (see “SDGE Marketplace Participation Project 2016.pdf” file for more information).
- Additional key learnings are included in Section IV of the OPRA Project Details document.

**ED DATA REQUEST
ED-SDG&E-DR-03
SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)
SDG&E RESPONSE
DATE RECEIVED: June 13, 2017
DATE RESPONDED: June 27, 2017**

Photo of finished Del Lago Park and Ride EV charging site showing solar canopy, charging stations and concrete block enclosure containing the electrical switchgear, metering, and the energy storage system.



4. In Chapter 3 of its testimony on page RS-21, SDG&E states that out of 60 park-and-rides in the San Diego region, Caltrans owns 33. Do any of the non-state-owned park-and-rides offer charging options for commuters? If so, could any information be collected or are there lessons learned that could be applied to SDG&E's pilot?

SDG&E Response:

No, none of the non-state-owned park-and-ride sites offer charging options for commuters.

5. In its response to the Energy Division data request 1, SDG&E's cost work papers show it is only assuming a 5 percent EVSE replacement need across the four sites and only a \$38,240 budget total for operation and maintenance costs in outer years.

ED DATA REQUEST
ED-SDG&E-DR-03
SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)
SDG&E RESPONSE
DATE RECEIVED: June 13, 2017
DATE RESPONDED: June 27, 2017

- a. What assumptions is SDG&E making about the need for operations and maintenance and EVSE replacement under its proposed ownership? How does that compare to the O&M and replacement needs at the two Caltrans sites where EVSE is currently installed?

SDG&E Response:

As outlined in SDG&E's project cost estimate sheet provided in response to Energy Division DR-01, Question 2, there is \$25,000 budgeted in first year O&M expenses (lines 148 and 149 in the ElecLocHwy tab). After that, as shown in lines 191 to 193, there is \$25,000 budgeted annually for labor and non-labor O&M, as well as \$13,240 budgeted annually for EVSE replacement. These assumptions were made using our experience in maintaining our workplace charging stations at SDG&E locations.

SDG&E cannot compare these cost estimates to other non SDG&E-owned sites because this data is not available.

- b. How long does SDG&E intend to operate and maintain the EVSE at the four Caltrans sites?

SDG&E Response:

Michael Calabrese's Chapter 6 testimony, table MAC-13, lists the useful life of the different assets.

Priority Review: Green Taxi/Shuttle/Rideshare

6. SDG&E states in response to Energy Division data request 1 that the EVSE will only be available for usage by program participants, so as to minimize wait times.
- a. How does SDG&E intend to restrict the usage of the EVSE installed as part of this program?

SDG&E Response:

SDG&E will restrict the usage of these EVSE to program participants by issuing fobs, access cards, or pin codes (depending on the manufacturer of the EVSE).

ED DATA REQUEST
ED-SDG&E-DR-03
SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)
SDG&E RESPONSE
DATE RECEIVED: June 13, 2017
DATE RESPONDED: June 27, 2017

Non-participating drivers won't have these credentials and won't be able to initiate a charging session.

- b. Will EVSE usage continue to be restricted after the one-year term of the pilot?

SDG&E Response:

SDG&E supports restricting access to these EVSE initially in order to reduce or eliminate wait times for the drivers in this project, but is open to lifting the restriction later in the project if it is clear that project driver access won't be affected. SDG&E will monitor and study the usage patterns of the charging stations as the project progresses and will revisit the EVSE restriction issue periodically.

Priority Review: Dealership Incentives

7. In response to Energy Division data request #1 question 5b, SDG&E states that it cannot gather data from dealers about current EV sales. Without this baseline, how does SDG&E propose to measure the effectiveness of its pilot? Would SDG&E require participating dealers to report sales information?

SDG&E Response:

SDG&E's answer in DR-01, question 5b (What are the dealerships' current annual EV sales rates) was that the information is not publicly available by dealership.

Our goal is to have each participating salesperson report the amount of EV sales they've made in the past, and we will track their individual EV sales moving forward as they register and submit their sales for their incentive(s). Only those sales people who have registered for the program and have attended the training will receive the incentive. For example, if a dealership has no sales people participating, that dealership will not receive any funding. We will also work with the dealerships in shaping the program in how best to create a baseline, knowing their sales information is proprietary.

ED DATA REQUEST
ED-SDG&E-DR-03
SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)
SDG&E RESPONSE
DATE RECEIVED: June 13, 2017
DATE RESPONDED: June 27, 2017

8. Why is the Sierra Club Multi-State Study of EV Shopping Experience¹ a good baseline to evaluate the success of the dealership incentive pilot?

SDG&E Response:

It represents a good baseline because there were eight dealerships in SDG&E's territory surveyed in the Sierra Club Multi-State Study of EV Shopping Experience on page 11 at the following link:

https://www.sierraclub.org/sites/www.sierraclub.org/files/uploads-wysiwig/1371%20Rev%20Up%20EVs%20Report_09_web%20FINAL.pdf

- a. What data contained in the study does SDG&E suggest using as a baseline? Is there any California-specific data?

SDG&E Response:

Yes, we plan to use the data from the survey questions of the eight dealerships in SDG&E's territory surveyed as a baseline for that information. Our plan is to continue to survey those customers from those eight locations via the project.

Standard Review: Residential Charging

9. If a household has more than one EV, does SDG&E plan to install multiple EVSEs for a single residence?

SDG&E Response:

SDG&E is not planning to install multiple EVSE for a single owner or driver. In many cases, installing two EVSE on one customer panel is more expensive and more technically challenging, and is not a part of the scope for the residential charging project.

¹ http://sierraclub.org/sites/www.sierraclub.org/files/uploads-wysiwig/1371%20Rev%20Up%20EVs%20Report_09_web%20FINAL.pdf

ED DATA REQUEST
ED-SDG&E-DR-03
SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)
SDG&E RESPONSE
DATE RECEIVED: June 13, 2017
DATE RESPONDED: June 27, 2017

Multi-unit Dwellings could have more than one EVSE installed if multiple EV drivers live there. They will be treated as separate installations that go to separate meters.

10. SDG&E states that it will pay for installations up to a cap, but that cap is well below the amount SDG&E states is the average cost of installing an L2 charger. Does this mean a customer would pay all of the costs and then be reimbursed by SDG&E up to the cap? Or, would SDG&E cover all costs, but seek payment from customers above the cap? Or, would installations that are projected to exceed the cost caps be ineligible for the program?

SDG&E Response:

- A) As outlined in Randy Schimka's Chapter 4 testimony on page RS-6, lines 1-5, SDG&E will pay for EVSE installations up to a cap that is different for three types of customers (single family homes - \$1,000, multi-family - \$1,125, and disadvantaged community - \$1,500). The customer will be responsible for paying the cost for their installation above and beyond that cap.
 - B) SDG&E will contract for the installation work to be done with an IBEW-affiliated contractor, and will pay the contractor up to the capped amount that applies to the customer. The customer will pay the contractor for the amount of the job that is above the cap.
 - C) Installations that are projected to exceed the cost cap will not be ineligible for the program. The customer can participate in the program by paying the difference between SDG&E's capped payment and the cost of the installation.
11. Does SDG&E plan to procure EVSE with embedded submeters, to be capable of participating in any future Submetering Protocol?

SDG&E Response:

SDG&E's residential charging program proposal does not include plans to install or rely on submeters.

ED DATA REQUEST
ED-SDG&E-DR-03
SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)
SDG&E RESPONSE
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DATE RESPONDED: June 27, 2017

12. Would SDG&E consider using submeters rather than installing new separate meters for each customer? If not, why not?

SDG&E Response:

SDG&E's residential charging program proposal does not include plans to install separate meters, or rely on submeters in EVSE for billing. The proposed Residential GIR whole-house rate would rely on the home's existing meter to measure consumption for the whole house and EV charging.

13. Does the customer need to agree to take service on the Residential GIR for a minimum amount of time to be eligible for the Program?

SDG&E Response:

A one year commitment is standard within SDG&E's tariff language.

14. How will SDG&E determine whether a participant is no longer using the L2 EVSE installed in its residential garage? Is there a certain amount of time the L2 could remain unused before SDG&E removes it?

SDG&E Response:

SDG&E plans on having an agreement in place with participating customers to notify SDG&E upon the sale or lease return of their EV with no replacement planned. This information will be used to determine when an L2 station won't be needed or used. As noted in Randy Schimka's Chapter 4 testimony on page RS-20 at line 1, "If a participant is no longer using the L2 EVSE, SDG&E will remove the EVSE so that it can be refurbished and recommissioned in a timely manner." SDG&E doesn't have a specific amount of time in mind needed to accomplish this.

15. SDG&E provided cost workpapers in response to Energy Division's data request #1. Line 41 "Maintenance (service calls)" assumes "1 service call / install @ \$250 each." Is this for the initial installation, or a subsequent visit to ensure the equipment is operational?

ED DATA REQUEST
ED-SDG&E-DR-03
SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)
SDG&E RESPONSE
DATE RECEIVED: June 13, 2017
DATE RESPONDED: June 27, 2017

SDG&E Response:

SDG&E budgeted a one-time amount of \$250 for each location for maintenance after the installation is complete and the equipment is in service.

16. Testimony states that the program aims to give customers a choice of EVSEs. SDG&E states that it intends to keep the Power Your Drive RFP process open² to provide opportunities for the Residential Charging program. However, SDG&E has closed its Power Your Drive RFP. The testimony at RS-24 also includes a summary of the process that will be followed for “both RFPs.”

- a. What are the two RFPs that will follow that summarized process? Does SDG&E intend to re-open the RFP for Power Your Drive and conduct a second RFP for the proposed Residential Charging program? Or is there another RFP associated with the Residential Charging program?

SDG&E Response:

The term “Both RFPs” references the RFP for the EVSE equipment and the RFP for the labor. SDG&E will conduct new RFPs specific to the Residential Charging Program for both the equipment and the labor.

- b. Will SDG&E limit the number of approved vendors or EVSE models that are qualified for the Residential Charging program?

SDG&E Response:

SDG&E does not intend to limit the number of vendors or EVSE models that can qualify for the Residential Charging program, but all participants will have to meet the requirements and criteria of the program.

- c. What lessons learned from the Power Your Drive RFP process could be used to expedite the RFP(s) conducted for the Residential Charging program?

SDG&E Response:

² Testimony Chapter 4 at RS-24.

ED DATA REQUEST
ED-SDG&E-DR-03
SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)
SDG&E RESPONSE
DATE RECEIVED: June 13, 2017
DATE RESPONDED: June 27, 2017

The “open RFP process” was the first of its type and helped SDG&E develop documentation and process flow evaluation that we will be able to use when conducting the Residential Charging Program RFP.

17. Why does SDG&E anticipate the Residential Charging program will not begin until 2020?

SDG&E Response:

Not knowing when a final decision would be issued, SDG&E proposed a schedule in Randy Schimka’s Chapter 4 testimony on page RS-11 for the Residential Charging program based on SDG&E’s request for a CPUC decision in 2018.³ SDG&E’s proposed schedule anticipates the following activities prior to installations beginning in 2020⁴:

- CPUC approval of Residential Grid Integrated Rate
- Establish vendor partnerships through the RFP process
- Internal IT billing development
- Equipment testing and validation
- Begin customer outreach
- Establish customer EVSE choice / purchase process

³ Randy Schimka Chapter 4 testimony, page RS-11, line 12

⁴ *Id.* at line 15.