SDAP DATA REQUEST
SDAP-DR 02
Application for Approval of Electric Vehicle High Power Charging Rate (A.19-07-006)
SDG&E RESPONSE
DATE RECEIVED: December 10, 2019
DATE RESPONDED: January 10, 2020

1. Instructions: These questions pertain to SDGE territory. Any time there is work to show, please provide it in the work paper format and a live excel document.

2. How many total small business customers do you have?

SDG&E Response: As of month ending November 2019 there are 132,394 Small Commercial customers with maximum demand below 20 kW (source: November 2019 R-1 Report).

3. How many total Medium/Large size business customers do you have?

SDG&E Response: As of month ending November 2019 there are 18,236 Medium/Large Commercial customer with maximum demand over 20 kW (source: November 2019 R-1 Report).

4. What is the average number of kW per month for Small Commercial Business VS Medium /Large Business?

SDG&E Response: Assuming this question is requesting monthly kWh consumption and not maximum kW**,** as of 12-months ending November 2019 (source: November 2019 R-1 Report):

- Small Commercial: 2,023 Average kWh per Month
- Medium/Large Business: 38,384 Average kWh per Month

5. What is the average number of kWh per month for Small Commercial Business VS Medium Business?

SDG&E Response: As of 12-months ending November 2019 (source: November 2019 R-1 Report):

- Small Commercial: 2,023 Average kWh per Month
- Medium: 19,054 Average kWh per Month

6. What is the average number of kWh per month and kW for TOU-M customers? How many TOU M customers are there?

SDG&E Response: As of December 2019, there are 3,557 customers on Schedule TOU-M. Using data for 12-months ending October 2019 (source: Monthly Electric Report 201910):

- Average Max Demand: 34.8 kW
- Average Monthly kWh: 6,713 kWh

7. **TOU M Rate:** What is the Demand Rate for the TOU-M rate over the 3 years since it was released.
    1. Please provide the rate for each release and the date of each release.

       SDG&E Response: Pursuant to California Public Utilities Commission ("CPUC") Decision ("D.") 17-08-030, SDG&E filed Advice Letter 3226-E implementing a $2.09/kW non-coincident demand ("NCD") rate for Schedule TOU-M on July 1, 2018, approved by Energy Division letter on July 16, 2018. The NCD rate for Schedule TOU-M changed on January 1, 2019 to $2.22/kW per SDG&E Advice Letter 3326-E approved by Energy Division letter on May 3, 2019, and changed again on January 1, 2020 to $2.50/kW per SDG&E Advice Letter 3487-E.

    2. When is the next release and what is the NCD rate in each release?

       SDG&E Response: The NCD rates for Schedule TOU-M will change next when there is a distribution revenue requirement and/or distribution rate design change. SDG&E does not know the timing of the next NCD rate change.

8. Please provide the 2019 number of customers and monthly revenue under SDG&E's standard small commercial rate **Schedule TOU-A** based upon the segmentation of the maximum annual demand based monthly service fees. The number of customers for each demand based monthly service fee segment is to be shown below in the table. These numbers include customers taking both primary and secondary service. Please fill in the tables shown below.

SCHEDULE TOU-A		
Max Annual Demand Level	**Customers**	**Average Monthly Revenue**
0-5 kW	60,237	$84.35
5-20 kW	68,727	$406.67
20-50 kW	9,379	$994.09
>50 kW	911	$3,528.06
Total	139,254	

9. Please provide the 2019 number of customers and monthly revenue under SDG&E's small commercial rate **Schedule TOU-M** based upon the segmentation of the maximum annual demand based monthly service fees. The number of customers for each demand based monthly service fee segment is to be shown below in the table. These numbers include customers taking both primary and secondary service. Please fill in the tables shown below.

SCHEDULE TOU-M		
Max Annual Demand Level	**Customers**	**Average Monthly Revenue**
0-50 kW	3,306	$1,511.9
>50 kW	251	$2,315.7
Total	3,557	

10. Please provide the 2019 number of customers and monthly revenue under SDG&E's standard medium and large commercial and industrial (M/L C&I) rate **Schedule AL-TOU** based upon the segmentation of the maximum annual demand based monthly service fees. The number of customers for each demand based monthly service fee segment is to be shown below in the table These numbers include customers taking both primary and secondary service. Please fill in the tables shown below.

SCHEDULE AL-TOU		
Demand Level	**Customers**	**Average Monthly Revenue**
Less than or equal to 500 kW	21,535	$4,860.69
Greater than 500 kW	862	$62,430.18
Total	22,397	

11. SDG&E's standard medium and large C&I rate Schedule AL-TOU has a Non-Coincident Demand charge and an On-Peak Demand charge. The 2019 monthly rate and revenues for customers taking secondary and primary service at 500 kW or less and over 500 kW, please fill in the tables shown below.

Schedule AL-TOU (Secondary) 500 kW or less		
	2019 Rate ($/kW)	**Average Monthly Revenue**
Non-Coincident Demand (NCD)	• $21.34/kW from 1/1/19 to 5/31/19 • $24.23/kW from 6/1/19 to Present	$1,629.00
On-Peak Summer	• $27.20/kW from 1/1/19 to 5/31/19	$1,122.79

	• $27.65/kW from 6/1/19 to Present	
On-Peak Winter	• $16.98/kW from 1/1/19 to 5/31/19 • $17.07/kW from 6/1/19 to Present	$956.99

Schedule AL-TOU (Primary) 500 kW or less		
	2019 Rate ($/kW)	**Average Monthly Revenue**
Non-Coincident Demand (NCD)	• $20.87/kW from 1/1/19 t0 5/31/19 • $23.66/kW from 6/1/19 to Present	$2,929.69
On-Peak Summer	• $26.98/kW from 1/1/19 t0 5/31/19 • $27.42/kW from 6/1/19 to Present	$2,039.12
On-Peak Winter	• $16.88/kW from 1/1/19 to 5/31/19 • $16.97/kW from 6/1/19 to Present	$1,737.71

Schedule AL-TOU (Secondary) Greater than 500 kW		
	2019 Rate ($/kW)	**Average Monthly Revenue**
Non-Coincident Demand (NCD)	• $21.34/kW from 1/1/19 to 5/31/19 • $24.23/kW from 6/1/19 to Present	$20,082.68
On-Peak Summer	• $27.20/kW from 1/1/19 to 5/31/19 • $27.65/kW from 6/1/19 to Present	$13,396.57
On-Peak Winter	• $16.98/kW from 1/1/19 to 5/31/19 • $17.07/kW from 6/1/19 to Present	$11,013.62

Schedule AL-TOU (Primary) Greater than 500 kW		
	2019 Rate ($/kW)	**Average Monthly Revenue**
Non-Coincident Demand (NCD)	• $20.87/kW from 1/1/19 to 5/31/19 • $23.66/kW from 6/1/19 to Present	$30,839.28
On-Peak Summer	• $26.98/kW from 1/1/19 to 5/31/19 • $27.42/kW from 6/1/19 to Present	$26,359.16
On-Peak Winter	• $16.88/kW from 1/1/19 to 5/31/19 • $16.97/kW from 6/1/19 to Present	$21,551.83

12. How many days can the **CPP rate** adder be applied annually?

SDG&E Response: As stated in Special Condition 12 of Schedule EECC-CPP-D and Special Condition 15 of Schedule EECC-TOU-A-P, a maximum of eighteen (18) CPP Events (called Reduce Your Use ["RYU"] events under Schedule EECC-TOU-A-P) can be triggered on any day of the week, year-round.

1. What is the CPP Rate?

   SDG&E Response: Schedule EECC-CPP-D is an optional commodity schedule for bundled customers that includes a Critical Peak Pricing adder.

2. Is there another release date for an increase on the CPP?

   SDG&E Response: The Schedule EECC-CPP-D commodity charges applicable for Schedule TOU-M last changed on January 1, 2020, when SDG&E implemented electric rates associated with its "Consolidated Filing to Implement January 1, 2020 Electric Rates", as filed in SDG&E's Advice Letter 3487-E.

3. If yes, when?

   SDG&E Response: Please see response to Question 12.2 above.

4. What are the rates for each increase?

SDG&E Response: The attached file ("SDAP DR-02, Q12.4") provides a comparison of the Schedule EECC-CPP-D rates implemented on June 1, 2019 to the rates implemented on January 1, 2020 per SDG&E Advice Letter 3487-E.

5. What are the times of the CPP Rate?

   SDG&E Response: As explained in Special Condition 12 of Schedule EECC-CPP-D and Special Condition 16 of Schedule EECC-TOU-A-P, the CPP Event Day Adder or RYU Event Period Adder will apply from 2 p.m. to 6 p.m. when CPP or RYU Events are called.

   1. Does this apply only in Summer Season?

      SDG&E Response: No. While historically CPP and RYU Events have been called mostly during the summer season, CPP and RYU events can be called any day of the week, year-round, as stated in Special Condition 12 of Schedule EECC-CPP-D and Special Condition 15 of Schedule EECC-TOU-A-P.

   2. Does this apply only on weekdays?

      SDG&E Response: No, as stated in response to Question 12.5.1 above, CPP and RYU events can be called any day of the week, year-round.

   3. Does this apply on Holidays?

      SDG&E Response: Yes, as stated in response to Question 12.5.1 above, CPP and RYU events can be called any day of the week, year-round, including holidays.

13. How much kW demand is used from the **EV community** as per the following EV customers?

    SDG&E Response: SDG&E does not have access to the kW demand for the EV community and only has access to usage and demand related to EVs that are separately metered through its programs. The EV usage and demand through its programs do not encompass the total EV community.

    1. Residential

2. EV workplace

3. EV MUD

4. EV Small Commercial

5. EV Large Commercial

6. Please be specific for each.

14. <u>SDGE EVSE Ownership and Rate to Driver billing</u>: Do EV drivers charging at any of the Rate to Driver billing sites pay additional fees beyond the kWh.

SDG&E Response: Rate-to-Driver sites in the Power Your Drive program do not charge any additional energy fees beyond the VGI rate price per kWh. A site host or charging company is allowed to charge a fee for additional services that may be rendered, but SDG&E would not be a party to that transaction.

1. Please explain and itemize the fees that are charged by detailing each fee.

   SDG&E Response: See response to Question 14.

2. Given that there are several locations, please explain how they differ, if they do.

   SDG&E Response: See response to Question 14.

3. For purpose of answering, only provide 5 sites based on variance of the site set up.

   SDG&E Response: See response to Question 14.

4. If there is any issue with answering, please provide the average fees and charges.

   SDG&E Response: See response to Question 14.

15. Why are some accounts assessing a 'City of San Diego Franchise Fee Differential' of as high as 6.88% and others have NO fee? (Only interested in an explanation for the fee

variance for the standard commercial customer this is not a CARE or discounted customer).

SDG&E Response: SDG&E's Preliminary Statement tariff states the following on Sheet 5 regarding franchise fee differentials:

> "H. FRANCHISE FEE DIFFERENTIAL AND TAXES
>
> 1. A Franchise Fee Differential will be applied to the billings calculated under all schedules for all customers within the boundaries of the hereinafter designated political subdivisions. The Franchise Fee Differential will be based on the difference between the franchise fee percentage and 1.1%. The following is the applicable Franchise Fee Differential: City of San Diego 5.78%.

Any customer account in the city of San Diego gets charged franchise fees of 6.88% (1.1% standard franchise fee plus the 5.78% franchise fee differential charged by the City of San Diego) and any customer account outside the city of San Diego will only be charged the standard 1.1% franchise fee that applies to all SDG&E customers.

1. What triggers this variance of over 1,000% between commercial customers that are in the AL TOU schedule?

   SDG&E Response: As explained in response to Question 15 above, the billed franchise fee difference is due to the location of the customer, with customers living in the City of San Diego getting charged the higher franchise fee accessed by the City of San Diego.

2. What is the lowest % and what is the highest % for a commercial customer in the AL TOU Schedules, ML/CI schedule, Small Business commercial schedule, or Pilot rates?

   SDG&E Response: As stated in response to Question 15 above, the lowest franchise fees is 1.1% for customers outside the City of San Diego and the highest franchise fee is 6.88% for customers in the City of San Diego.

3. What are the drivers of this rate for a commercial customer that is not a CARE customer or discounted customer?

   SDG&E Response: The location of the customer with customers living in the City of San Diego paying the higher franchise fee because of the 5.78% Franchise Fee Differential that the City of San Diego accesses.

16. **Taxes at end of billing statement:** Between the following fees regarding the City of San Diego Franchise Fee Differential at 5.78%, the Franchise fees on Electricity supplied by others at 6.88%, the State Surcharge Tax at $.000300, and the State Regulatory Fee at $.000580:
    1. On average what is the total impact cost to each kWh in this billing scenario?

       SDG&E Response: Because the franchise fee differential is applied to the customer's monthly bill and not applied on a kWh basis, SDG&E is unable to determine the total impact on each kWh as requested. Basically, the State Surcharge Tax and State Regulatory Fee combined will have an impact of $0.00088 per kWh and the franchise fee impact will depend on the customer's total monthly bill amount prior to taxes and fees.

    2. How much does this impact the billing for each kWh? For example, is this on average another 2 cents per kWh? If not, what is it?

       SDG&E Response: See response to Question 16.1.

    3. What is the formula that could be used for a customer to determine the impact overall if all 4 fees were on the billing? For example, what is the $ per kWh?

       SDG&E Response: To calculate the $/kWh monthly impact from these fees and franchise fees the customer could use the following formulas;

       State Surcharge Tax and State Regulatory Fee Impact: $0.00088 multiplied by the customers total monthly kWh on the customer's monthly bill.

       Franchise Fee Impact: franchise fee percentage applied on the customer's monthly bill multiplied by the customer's monthly bill amount prior to taxes and fees.

       Total $/kWh Bill Impact: combine the State Surcharge Tax and State Regulatory Fee Impact and the Franchise Fee Impact and divide this dollar amount by the total monthly kWh on the customer's monthly bill to derive the total $/kWh bill impact from these taxes and fees.

    4. If the volume of kWh is increased monthly, does this impact more cost per kWh? If not, why not.

       SDG&E Response: Yes. Any increase in the monthly kWh used by the customer will directly impact the State Surcharge Taxes and State Regulatory Fees paid

because these taxes and fees are applied on a kWh basis, and indirectly increase the franchise fees paid since the customer's bill amount will be higher with more kWh used.

17. **City of San Diego customer**: How much more do the City of San Diego SDGE customers pay per kWh on average more than the other SDGE customers that are not in the City of San Diego?

    SDG&E Response: As stated in response to Question 16 above, Customers within the City of San Diego are subject to an additional San Diego Franchise Fee Differential line-item, based on 5.78% of the customer's Total Electric Charges. Customers within and outside the City of San Diego are subject to the same tariffed rate schedules and rates per kWh.

18. **Seasonal Periods**: Are there seasonal periods in the VGI or Public GIR rates for EV drivers?

    SDG&E Response: Schedule VGI and Schedule Public GIR do not have seasonal periods because neither rate schedule has seasonal rate differences. However, both Schedule VGI and Schedule Public GIR have hourly rates.

19. **Standard Small Commercial Rates**: Does the standard small commercial rate customers have Off peak for all hours on Weekend and Holidays?

    SDG&E Response: Yes. All weekend and holiday hours are in the off-peak period for SDG&E's standard small commercial rate schedule, as shown on the top of Sheet 3 of Schedule TOU-A.

20. **For Small Commercial Customers**: Would the HP Rate be exposing the standard small commercial customers to 3 tier rates, weekend and holidays with 3 tiers vs all off peak and a form of demand charges for the first time? (subscription charges are assumed to be a form of demand charges)

    SDG&E Response: The proposed EV-HP rate is not a tiered rate.

    1. **In your opinion do you believe that small business customers will have more of a challenge with EV adoption due to these factors over large customers**? If not, why not?

    SDG&E Response: As stated in the response to Question 20 the proposed EV-HP rate is not a tiered rate, and this lack of tiers is not expected to impact small business customers.

21. What if there are individual meters installed within the charging stations: how is the demand subscription measured?

    SDG&E Response: The EV-HP rate is billed off the utility meter.

22. One EVSE installed and metered by itself that is a Level 2 at a workplace that has MHD vehicles: is this customer eligible for the HP rate?

    SDG&E Response: Yes, separately-metered MD/HD EV charging is eligible for the EV-HP rate.

23. Subscription Blocks: How many subscription blocks would a site need to purchase if they have EVSE's separately metered on more than one meter? For example, in this scenario how would billing in the HP Rate impact the number of subscription blocks required for this scenario:

    SDG&E Response: The EV-HP subscription charge is based on a customer's expected maximum non-coincident demand, not the number of chargers. Non-coincident demand, and accordingly the monthly subscription charge, can be reduced via load management techniques and vehicle-grid integration.

    1. One meter of EVSE's has ten EVSE's at 6.6 kW each

       SDG&E Response: See response to Question 23.

    2. One meter has two EVSE's at 14 kW each

       SDG&E Response: See response to Question 23.

    3. One meter has two DCFC's at 62.5 kW each

       SDG&E Response: See response to Question 23.

    4. One meter has one EVSE at 14 kW each
        1. In the above scenario, does this qualify for the HP rate?

           SDG&E Response: The EV-HP rate is an optional rate for separately-metered DC fast charging and MD/HD EV load.

        2. What is the number of subscription blocks the customer would need?

           SDG&E Response: See response to Question 23.

24. Demand interval: What is the demand-based interval for the Subscription block?

SDG&E Response: The proposed EV-HP subscription charge is calculated based on the customer's maximum monthly no-coincident demand, over a 15-minute interval.

1. Is it 15 minutes, If not, why not?

SDG&E Response: See response to Question 24.

25. Subscription Blocks: How are subscription block to be measured? Please explain.

SDG&E Response: See response to Question 24.

26. What if the customer only charges for 5 or 10 mins at one time, how is the measure of the demand impacted?

SDG&E Response: See response to Question 24.

1. Is it averaged over the 15 minutes? If not, why not and please explain.

SDG&E Response: See response to Question 24.

27. Losses: In your use-cases did you factor in any losses in your illustrated rates, cost and saving results?

SDG&E Response: The illustrative customer scenarios presented in the EV-HP Chapter 3 prepared testimony do not include estimated losses between the utility meter and EV.

28. Losses: Do you agree that there are losses in EV charging from the metered billing compared to the useable kWh?

SDG&E Response: Yes, there would be losses associated with EV charging from the metered billing compared to what is delivered to the vehicle. The losses would vary, depending on where the metered point is located.

1. What factor is a reasonable loss to consider in percentages?

SDG&E Response: SDG&E has not conducted these type of efficiency tests with EV charging stations.

2. What are the main drivers of the loss factor %?

SDG&E Response: There are different types of losses that could occur when charging an electric vehicle. For example, heat could be generated in charging equipment that consumes energy after the meter before it is delivered to the vehicle, or a vehicle could have a cooling system that runs when charging (which consumes some of the input power from the charging station). Both of these examples would show up as losses when measuring power from the meter on the charging station to the battery on the vehicle.

29. Weather: Will cold weather create losses in my EV vehicle charging or range of use in my vehicle?

    SDG&E Response: SDG&E is not a vehicle manufacture and cannot speak to the performance of specific EVs.

    1. If more losses does that equate to reduced fuel economy?

       SDG&E Response: See answer to Question 29.

    2. If my fuel economy is reduced will that increase my miles per kWh cost?

       SDG&E Response: See answer to Question 29.

    3. If not, why not?

       SDG&E Response: See answer to Question 29.

    4. Please explain this loss impact on cost per mile.

       SDG&E Response: See answer to Question 29.

30. How many MHD EV's are required to be purchased to qualify for the SDGE MHD make ready?

    SDG&E Response: Per the SDG&E MD/HD Program requirements participants are required to procure at least two EVs or convert at least two diesel fueled vehicles to electric.

31. Do Electric MHD vehicles have shortened range compared to liquid fossil fuel vehicles?

    SDG&E Response: SDG&E is not a vehicle manufacture and cannot speak to the performance of specific EVs.

32. If a vehicle as a range of 120 miles and gets 3.8 miles per kWh, how many kWh does the battery pack have?

SDG&E Response: SDG&E objects to this request as an inappropriate form of discovery. The request seeks information (i.e., a calculation) that is not unique to SDG&E or can only be obtained from SDG&E.

33. If a vehicle has a range of 120 miles and gets 1 kWh per mile, how many kWh does the battery pack have?

SDG&E Response: SDG&E objects to this request as an inappropriate form of discovery. The request seeks information (i.e., a calculation) that is not unique to SDG&E or can only be obtained from SDG&E.

34. If a vehicle as a range of 120 miles and gets 1.4 kWh per mile, how many kWh does the battery pack have?

SDG&E Response: SDG&E objects to this request as an inappropriate form of discovery. The request seeks information (i.e., a calculation) that is not unique to SDG&E or can only be obtained from SDG&E.

35. If a vehicle as a range of 120 miles and gets 2.2 kWh per mile, how many kWh does the battery pack have?

SDG&E Response: SDG&E objects to this request as an inappropriate form of discovery. The request seeks information (i.e., a calculation) that is not unique to SDG&E or can only be obtained from SDG&E.

36. The Standard battery pack size in a Nissan Leaf is 40 kWh and the average real-world range is 128 miles.
    1. How many miles per kWh does it achieve?

SDG&E Response: SDG&E cannot speak to the performance of the Nissan Leaf, which is not manufactured by SDG&E.

    2. How many kWh per mile is that?

SDG&E Response: See response to Question 36.1.

37. The Standard battery pack size in a Model 3 Tesla is 50 kWh and the average real-world range is 200 miles.

1. How many miles per kWh does it achieve?

SDG&E Response: SDG&E cannot speak to the performance of the Tesla Model 3, which is not manufactured by SDG&E.

2. How many kWh per mile is that?

SDG&E Response: See response to Question 37.1.

38. The largest battery pack size in a Model 3 Tesla is 75 kWh and the average real-world range is 300 miles.
    1. How many miles per kWh does it achieve?

SDG&E Response: This information is not specific to SDG&E and is not appropriate for discovery.

2. How many kWh per mile is that?

SDG&E Response: See response to Question 38.1.

39. How long does it take to charge a battery pack that is 50 kWh with the following EVSE power that is also accepted in the vehicle?
    1. EVSE at 7 kW

SDG&E Response: SDG&E objects to this request as an inappropriate form of discovery. The request seeks information (i.e., a calculation) that is not unique to SDG&E or can only be obtained from SDG&E.

2. EVSE at 20 kW

SDG&E Response: See response to Question 39.1.

3. EVSE at 50 kW

SDG&E Response: See response to Question 39.1.

4. EVSE at 70 kW

SDG&E Response: See response to Question 39.1.

40. How long does it take to charge a battery pack that is 75 kWh with the following EVSE power that is also accepted in the vehicle?
    1. EVSE at 7 kW

SDG&E Response: SDG&E objects to this request as an inappropriate form of discovery. The request seeks information (i.e., a calculation) that is not unique to SDG&E or can only be obtained from SDG&E.

2. EVSE at 20 kW

SDG&E Response: See response to Question 40.1.

3. EVSE at 50 kW

SDG&E Response: See response to Question 40.1.

4. EVSE at 80 kW

SDG&E Response: See response to Question 40.1.

41. How long does it take to charge a battery pack that is 125 kWh with the following EVSE power that is also accepted in the vehicle?
    1. EVSE at 7 kW

SDG&E Response: SDG&E objects to this request as an inappropriate form of discovery. The request seeks information (i.e., a calculation) that is not unique to SDG&E or can only be obtained from SDG&E.

2. EVSE at 20 kW

SDG&E Response: See response to Question 41.1.

3. EVSE at 50 kW

SDG&E Response: See response to Question 41.1.

4. EVSE at 80 kW

SDG&E Response: See response to Question 41.1.

42. How long does it take to charge a battery pack that is 300 kWh with the following EVSE power that is also accepted in the vehicle?
    1. EVSE at 7 kW

SDG&E Response: SDG&E objects to this request as an inappropriate form of

discovery. The request seeks information (i.e., a calculation) that is not unique to SDG&E or can only be obtained from SDG&E.

2. EVSE at 20 kW

SDG&E Response: See response to Question 42.1.

3. EVSE at 50 kW

SDG&E Response: See response to Question 42.1.

4. EVSE at 80 kW

SDG&E Response: See response to Question 42.1.

43. If the maximum range of the EV is 120 miles but the operation requires that the vehicle run 250 miles daily for its operation, does that mean that this will require to charge during the daytime too? If not, why not?

SDG&E Response: SDG&E objects to this request as an inappropriate form of discovery. The request seeks information (i.e., a calculation) that is not unique to SDG&E or can only be obtained from SDG&E.

1. Assumptions:
2. The vehicle fully charges at nighttime between midnight and 4am, it is full by 4am. Vehicle range is 120 miles, fuel economy is 1 kWh per mile, EVSE is DCFC charging at 50 kW and the vehicle accepts 50 kW.
3. The shift #1 starts at 4am and runs 125 miles, ends at 1pm.
4. The shift #2 starts at 1pm and runs 125 miles, ends at 10pm.
5. If the driver in shift 1 plugs in 10 mins every 1 hour, how many miles will be gained?
    1. 10 mins x 9 hours = 90 mins or 75 miles, do you agree?

        SDG&E Response: See response to question 43.

6. If the driver in shift 1 drove 125 miles, what will be his miles remaining at the end of his shift?
    1. Shift #1 drove 125 miles, replenished 75 miles, when he ends his shift, he has 70 miles remaining, do you agree?

        SDG&E Response: See response to question 43.

7. If the driver in shift 2 plugs in 10 mins every 1 hour, how many miles will be gained?
    1. 10 mins x 9 hours = 90 mins or 75 miles, do you agree?

        SDG&E Response: See response to question 43.

8. If the driver in shift 2 drove 125 miles, what will be his miles remaining at the end of his shift?
    1. Shift #2 drove 125 miles, replenished 75 miles, when he ends his shift, he has 25 miles remaining, do you agree?

        SDG&E Response: See response to question 43.

9. If both drivers in each shift missed two charging sessions because the charger was being used when they got back to the lot, what would happen to the driver in shift 2?

    SDG&E Response: See response to question 43.

44. Is charging for commercial operations going to be dictated by the drivers needs?

    SDG&E Response: SDG&E objects to this request as an inappropriate form of discovery. The request seeks information (i.e., a calculation) that is not unique to SDG&E or can only be obtained from SDG&E. Also, the question is vague and ambiguous as to "drivers needs."

45. Based on SDGE MHD Decision and Settlement Agreement for adoption of 6,068 vehicles, please document and provide in a table format, the sectors you illustrated for site adoption and include the following: Fleet Sector Type, Off road or On road vehicles, Number of sites and Quantity of vehicles, include the classes size of vehicles for each sector, the EVSE quantity for each site, the kW power of the EVSE for each site, the quantity of adoption numbers in years 1, year 2, year 3, year 4 and year 5 for each sector.

    SDG&E Response: Vehicle sector, estimated number of sites, estimated number of vehicles are given in A.18-01-012 Settlement Motion Appendix A. Other requested information was not estimated by SDG&E.

46. In the SDGE MHD Decision, in Appendix A, Provision III.B.b, SDGE states "EV uptake is expected to accelerate in later years", can you provide an example of the uptake over 5 years by one site?

    SDG&E Response: This information was not estimated by SDG&E.

1. Can you provide a real-world example of a small fleet and a large fleet?

   SDG&E Response: See response to Question 46.

2. Please provide Foothill Transit adoption uptake since they first adopted.

   SDG&E Response: This question is more appropriately addressed to Foothill Transit, a transit agency not located in SDG&E service territory.

47. Since EV uptake will take several years, how will this impact the load factor for a site?

SDG&E Response: The impact of EV adoption on site load factor is expected to vary by site.

1. Is a low load factor likely to create more cost per mile for fleets than fossil fuels when separately metered and on SDGE AL TOU rate?

SDG&E Response: Low load factors typically result in higher average per kWh costs on demand-metered electric rates.

2. Are you aware of fleet customers that have faced this problem since adopting EV's in the SDGE territory and are on the AL TOU rate?

SDG&E Response: SDG&E is aware of fleet customers with low load factors and a relatively high average cost per kWh of electricity on the existing AL-TOU rate.

48. Approximately 157,166 commercial customers exist in the SDGE territory.
    1. 129,066 or 82% are small commercial customers
    2. 18,664 or 12% are ML customers
    3. 3,847 or 2.5 % are Agriculture customers
    4. 5,589 or 3.5 % are Street Light customers
        1. Are the above correct, if not, please correct.

           SDG&E Response: SDG&E cannot confirm the values stated. Customer numbers by customer class change daily and are compiled monthly in SDG&E's reporting processes. If SDAP can provide the source document SDG&E may be able to confirm the numbers and reconstruct the percentages shown.

        2. Based on the above data, wouldn't it be true that your highest number of fleet EV customer sites will be small commercial businesses?

           SDG&E Response: Not necessarily. Medium and large commercial customers may adopt fleet EVs sooner than Small commercial customers.

1. If not, why not?

SDG&E Response: See response to Question 48.2.

49. Can you install your own infrastructure and still qualify for the make ready and the HP rate, if not why not, please explain your answer?

SDG&E Response: Separately-metered MD/HD EV charging is eligible for the EV-HP rate. It is not clear what this question means by "qualify for the make ready." Receiving infrastructure through the SDG&E MD/HD Program will require qualifying for and participating in the Program.

50. Per the Open Access requirement for Charging, location data will be published and maintained by AFDC.energy.gov and required to be reported by the EVSE providers to ensure accurate and up to date data is available to all consumers and the public; as such, the following data that is currently published is below and has been cross referenced with Plugshare.com and the SDGE PR pilot sites for the Cal Trans Public charging sites.

SDG&E Response: SDG&E objects that this question is not appropriately addressed to SDG&E.

51. Per AFDC.energy.gov, there are a total of 18,795 level-2 chargers over 5,121 sites in California and a total of 3,325 DCFC chargers over 848 sites in California, this equates to an overall total of 22,120 public chargers in California . SDGE territory has a total of 1,596 level 2 charging over 454 sites and a total of 221 DCFC chargers over 56 sites, this equates to an overall total of 1,652 sites in San Diego with 270 of these by Tesla. This results in SDGE territory having almost 9% of Level 2 charging and almost 7% of DCFC charging out of California Public Chargers.
    1. Based on the population do you consider this adequate in comparison to the PGE territory?

    SDG&E Response: SDG&E objects that it cannot speak to the accuracy of the figures in the question. Subject to and without waiving this objections, SDG&E states that it believes more EV chargers are necessary to accelerate transportation electrification and support the EVs needed to meet state GHG reduction goals.

    2. Do you agree with that the above numbers are close to accurate?
        1. If not, what are the correct numbers?

        SDG&E Response: SDG&E cannot speak to the accuracy of Alternative Fuels Data Center data.

SDAP DATA REQUEST
SDAP-DR 02
Application for Approval of Electric Vehicle High Power Charging Rate (A.19-07-006)
SDG&E RESPONSE
DATE RECEIVED: December 10, 2019
DATE RESPONDED: January 10, 2020

52. Electrify America has mentioned concerns for future deployment in San Diego due to it rates.
    1. Do you believe the commercial SDGE rates along with "NO" commercial EV rate available has impacted this territory? If not, why not.

SDG&E Response: SDG&E cannot speak for business decisions by Electrify America, a third-party company.

53. Why did SDGE not offer an interim rate in the MHD A.1801012 application?

SDG&E Response: The focus of the application was to reduce the upfront cost of EV adoption by supporting customers through the provision of infrastructure.

1. SDGE has requested an urgent need for the interim rate yet SDAP has requested SDGE offer an interim rate for commercial EV fleets in the SB350 A1701020 SR proceeding in 2017 / 2018 and the SDGE MHD A1801012 proceeding in 2018 / 2019.
2. What were the drivers for an urgent interim rate and when did this impact SDGE's position to offer an interim rate?

SDG&E Response: SDG&E proposed the interim rate as part of A.19-07-006 due to constraints on when the proposed EV-HP rate could be offered due to a CIS replacement project.

3. Did you ever contact SDAP regarding its positions on the EV commercial interim rate for large commercial customers?

SDG&E Response: SDG&E did not contact SDAP prior to filing the EV-HP application. However, SDG&E and SDAP have engaged in several discussions over the course of several EV-related proceedings.

4. In your opinion, do you believe that because SDGE has not offered an EV commercial rate that this has impacted fleets transitioning?

SDG&E Response: SDG&E proposed a commercial EV rate in A.17-01-020 which was denied by the CPUC. SDG&E believes that a commercial EV rate is important to accelerate EV adoption.

5. If you would have offered an EV rate, even an interim rate like SCE and PGE did for early commercial operators, do you believe there would have been more EV adoption in the SDGE territory? If not, why not?

SDG&E Response: SDG&E objects that this question calls for speculation.

Subject to and without waiving this objection, SDG&E responds as follows: there are many factors that influence customer decisions on vehicle procurement. SDG&E cannot speculate if an interim rate in previous years would have increased adoption due to the lack of EV options and cost of EVs in those previous years.

54. Per the AFDC.energy.gov and PlugShare.com websites, including the four PR pilot Electrify Highway sites available on the SDGE's regulatory site for A.1701020 ---The number of public EV fueling station locations (sorted by SDGE territory zip codes to filter out the SDGE public charging stations) and data on charging sites in SDGE territory is the following: there are 458 sites with Level 2 charging which includes a total of 1,676 level-2 chargers. There is a total of 60 sites with DCFC charging which includes a total of 225 DCFC chargers. This is an overall total of 496 public charging sites in SDGE territory and establishes that 436 sites have only Level 2 charging available, 38 sites have only DC charging available, and 22 of these sites have both DCFC charging with Level 2 available.
    1. Of the 436 sites with only level 2 charging available, are any of these sites not eligible for the HP EV Rate?

    SDG&E Response: The proposed EV-HP rate is an optional rate for separately-metered DC fast charging and MD/HD EV charging. A site with Level 2 EVSE charging MD/HD EVs is eligible for the EV-HP rate. A site with only Level 2 EVSE charging for light-duty EVs is not eligible for the EV-HP rate.

    2. If not eligible, please explain why not.

    SDG&E Response: SDG&E proposed the EV-HP rate as applicable to separately-metered DCFC and MD/HD EV charging in response to stakeholder feedback that existing Commercial/Industrial rates are not suitable for these EV charging customers.

    3. If some are eligible, explain why.

    SDG&E Response: See response to Question 54.1.

    4. Is DCFC chargers required at a public or workplace site to be eligible for the HP Rate?

    SDG&E Response: See response to Question 54.1.

    5. Is a fleet site with only Level 2 chargers eligible for the HP Rate?

    SDG&E Response: See response to Question 54.1.

6. Is a fleet site with only Level 2 chargers eligible for the HP Rate if they have a MHD vehicle?

   SDG&E Response: See response to Question 54.1.

7. Is a fleet site with only Level 2 chargers eligible for the HP Rate if they have TNC car(s) charging?

   SDG&E Response: See response to Question 54.1.

8. Can a PYD pilot site change to this rate after being on the PYD rate for one year?

   SDG&E Response: As approved in D.16-01-045, sites participating in the Power Your Drive program are required to take service on Schedule VGI.

9. Are non-networked sites eligible for the HP rate? If not, explain why not.

   SDG&E Response: Non-networked sites are eligible for the proposed EV-HP rate as long as the load served is separately-metered DCFC or MD/HD EV load.

55. Can you please illustrate these facts and the below by documenting the <u>informational details of these public DCFC charging sites (60 total)</u> in an excel document in the form of a table, which includes the following information:
    1. EVSE Vendor
    2. Commercial Entity name of Site Host
    3. Location: name of city and zip code
    4. Quantity of EVSE's
    5. Quantity of each DCFC chargers per site
    6. Quantity of each Level 2 chargers per site, some sites also have Level 2 chargers available at DCFC charging sites.
    7. The kW power of each Charger (can find by actual vendor site or plugshare.com and click on location for actual kW and other pricing details and quantity).
    8. What is the overall Total kW power maximum for the site (assuming all EVSE's are charging at the same time)?
    9. How many subscriptions blocks is required for this customer based on the EVSE's and their amount of kW power on site with all the EVSE's. (if all were utilized at the same time)
    10. Show the total other fees (beyond kWh energy) for the customer at this site, if there are any.
    11. Are these networked chargers: Yes or No?
    12. Connectors types for each EVSE
    13. List the prices per kWh at the site.

14. List any and all other fees individually that a driver will be charged at this site for a charging session beyond the kWh energy.

SDG&E Response: SDG&E is not aware of the site characteristics of public DCFC sites not owned and operated by SDG&E.

56. Show the cost per mile for a new gasoline passenger vehicle that has a fuel economy of 33 mpg and purchases fuel at $3.75 per gallon.
    1. Also, show the cost per mile but, without all the fuel taxes for gasoline which is approximately 0.73 cents per gallon.

SDG&E Response: This is not information specific to SDG&E and is not appropriate for discovery.

57. Can you please explain if Chargepoint who has 6 locations with a DCFC station – do all the sites qualify for the HP rate at all locations/sites regardless of the meter at different addresses with DCFC or not?

SDG&E Response: The proposed EV-HP rate is open to separately-metered DC fast charging and MD/HD EV electric load only.

    1. It appears that Chargepoint is the customer of record at up to 235 sites in San Diego with only Level 2 charging, 6 sites with DCFC charging available and 2 sites with both Level 2 charging and DCFC. Please explain why Chargepoint sites with multiple Level 2 charging stations only --- would or would not qualify for the HP Rate.
    2. ChargePoint has about 34 of these sites with a minimum quantity of eight Level 2 chargers, why would they not qualify at the Level 2 charging only sites with the HP Rate when 8 level 2 chargers at one site equal the same demand power measure or more than one 50 kW DCFC?

       SDG&E Response: See response to Question 57.

    3. Please explain the reasonableness of this answer.

       SDG&E Response: SDG&E object to this question as vague and ambiguous. Subject to and without waiving this objection, SDG&E would argue that the reasonable of its responses are self-evident.

58. Other Customers that face low load factors with multiple level 2 chargers that do not have a DCFC on site at a location or a MHD fleet vehicle, do they qualify for the HP Rate.

1. Please explain the reasonableness of your answer and explain how a workplace site or fleet operators with light duty passenger cars, each with ten Level 2 chargers on site, why they would not qualify?

SDG&E Response: The proposed EV-HP rate is open to separately-metered DC fast charging and MD/HD EV electric load only.

59. Does the same apply to sites at workplace and MUD dwellings that have only Level 2, will they qualify for the rate? If not, why not? What is the reasonableness of your answer?

SDG&E Response: The proposed EV-HP rate is open to separately-metered DC fast charging and MD/HD EV electric load only.

60. Do NON-networked workplace chargers with DCFC charging qualify for the rate? If not, why not, please explain.

SDG&E Response: Networking is not a proposed requirement of the EV-HP rate.

61. Scenario #1, Assumptions are the following: each charging session achieves 10 kWh from the DCFC on a passenger car, this achieves 38 miles charged from each charging session based on the following vehicle fuel efficiency of 3.8 miles per kWh and based on a vehicle that charges at 50 kW of power.
    1. Please indicate what is likely to be the amount of time for each charging session in the above scenario 1.
    2. How many miles need to be charged daily at each site to accomplish 1,027,137 annual kWh based on the same assumptions but with four 50 kW DCFC chargers available per site.
        1. How many hours and mins will this be of charging at the site daily?

SDG&E Response: SDG&E objects to this request as vague, ambiguous and an inappropriate form of discovery. The request seeks information (i.e., a calculation) that is not unique to SDG&E or can only be obtained from SDG&E.

2. How many daily charging sessions does this result in?

SDG&E Response: See response to Question 61.2.1.

3. What is the monthly load factor % based on these assumptions?

SDG&E Response: See response to Question 61.2.1.

62. Scenario #2 Illustrate with this same assumption for Scenario 2 --- but instead of four 50 kW DCFC chargers, use: three Level 2 chargers at 7kW each and one DCFC charger at 24 kW for the site. Use the same assumptions above (except for the chargers) and please provide the answers for Scenario 2 as you did for Scenario #1.

SDG&E Response: SDG&E objects to this request as vague, ambiguous and an inappropriate form of discovery. The request seeks information (i.e., a calculation) that is not unique to SDG&E or can only be obtained from SDG&E.

63. How many early EV adopting commercial customers have existing EVSE chargers installed on the existing facility meter and thereby the chargers are not separately metered?

SDG&E Response: SDG&E is not aware of this information.

1. Are these customers eligible for the HP rate? If not, why not.

SDG&E Response: The proposed EV-HP rate is open to separately-metered DC fast charging and MD/HD EV electric load only.

2. In the A.15-04-012 Evidentiary hearings Volume 4 at 387, Lisa McGhee with Cyndee Fang stated on Nov 29, 2016, SDAP was the only commercial customer with an EV fleet--- outside of the current PR pilot EV commercial fleet customers are there any other EV commercial fleet customers in SDGE territory? If so, how many? What rate do they take service on? How many MHD EV's do they have or EV's? And how many EVSE's on the site and what is the EVSE kW power?

SDG&E Response: SDG&E cannot comment on MD/HD EV fleets in SDG&E service territory outside of SDG&E programs.

64. In San Diego there are a total of 229 DCFC public chargers at the following 60 sites per the AFDC.energy.gov site plus the Electrify Highway Cal Trans PRP pilots:
    1. Cal Trans (PRP site not listed on AFDC site): has a total of 4 sites with DCFC chargers. 4 sites have a quantity of 2 DCFC's and 20 Level 2's.
        1. DCFC Power for each: 62.5 kW each x 2
        2. Level 2 Power for each: 6.6 kW each x 20
            1. = 232 kW per site (average if all EVSE's were used at the same time with a max of 50 kW DC for each DC car charging session)
    2. Chargepoint: has a total of 6 sites with DCFC chargers. 2 sites have a quantity of 4 DCFC's and 4 of these sites have a quantity of 1 DCFC.
        1. DCFC Power for each: 24 kW to 125 kW each.
            1. = 125 kW per site (average if all EVSE's were used at the same time with a max of 50 kW DC for each DC car charging session)

3. EVgo: has a total of 28 sites with DCFC chargers. 22 of these sites have a quantity of 2 DCFC's, 1 site has a quantity of 4 DCFC's and 5 sites have a quantity of 1 DCFC with a few sites that typically 1 Level 2.
    1. DCFC Power for each: 50 kW each x 2
    2. Level 2 Power for each: 7.2 kW each x 1
        1. = 108 kW per site
4. Electrify America has a total of 4 sites with DCFC chargers. 4 of these sites have a quantity of 3 DCFC's and 1 Level 2.
    1. DCFC Power for each: 150 kW each x 3
    2. Level 2 Power for each: 7 kW each x 1
        1. = 157 kW per site (average if all EVSE's were used at the same time with a max of 50 kW DC for each DC car charging session)
5. Green Lots: has a total of 3 sites with DCFC chargers. 3 of these sites have a quantity of 2 DCFC's.
    1. DCFC Power for each: 50 kW each x 2
        1. = 100 kW per site
6. Tesla: has a total of 8 sites with Super chargers. 2 of these sites have a quantity of 20 Super Chargers, 2 of these sites have a quantity of 12 Super Chargers, 1 of these sites have a quantity of 7 Super Chargers, 1 of these sites have a quantity of 16 Super Chargers, 1 of these sites have a quantity of 18 Super Chargers, and 1 of these sites have a quantity of 24 Super Chargers.
    1. DCFC Power for each: 72 kW x 20 or 150 kW each x 12
        1. = 1,440 kW per site (average if all used at same time with max of 72 kW DC)
        2. = 1,800 kW per site (average if all used at same time with max of 150 kW DC)
7. Nissan Car Dealership: has a total of 4 sites with DCFC chargers. 4 of these sites have a quantity of 1 DCFC.
8. City of Chula Vista has a total of 1 site with 2 DCFC chargers.
9. Best Western, Escondido has a total of 1 site with 2 DCFC chargers.
10. Holiday Inn, Oceanside has a total of 1 site with 1 DCFC charger.
    1. Please explain if customer 1-10 listed above appears accurate as far as DCFC public charging station customers in SDGE territory or please explain if you consider this not correct and why and provide correct information.

SDG&E Response: SDG&E cannot comment on the site characteristics of public DCFC sites not owned and operated by SDG&E.

    2. This data equates to 60 DCFC public charging sites, is this about accurate in SDGE territory? If not, why not and please provide the correct answer.

SDG&E Response: See response to Question 64.1.

3. Have you tracked the load % factor from these customers? If not, why not?

SDG&E Response: SDG&E objects that this question seeks confidential customer information. Generally, SDG&E cannot share such information without the consent of each specific customer.

4. What is the average load % factor for each customer?

SDG&E Response: See response to Question 64.3.

5. Are these all separately metered customers in 1-6 listed customers? If not, please explain why not.

SDG&E Response: See response to Question 64.1.

65. Based on the above 60 DCFC site data, this results in the following:
    1. Out of 60 sites: 51% has 2 DCFC's on site
    2. Out of 60 Sites: 24% has 1 DCFC on site
    3. Out of 60 Sites: 12% have 3-4 DCFC's on site
    4. Out of 60 Sites: 13% have 7-24 DCFC's on site (all Tesla).

    2. Based on the above data, this results in the following average at a site for DCFC charging (not including Tesla):
        1. Two DCFC chargers per site
        2. 44kW and up to 62.5kW each per Charger kW power
        3. Results in a total of 94 kW and 125 kW per site
        4. Do you agree with this, if not why not? What are the correct answers?

SDG&E Response: SDG&E objects that this question is vague and ambiguous. Subject to and without waiving this objection, SDG&E states that it cannot comment on the site characteristics of public DCFC sites not owned and operated by SDG&E.

66. It appears that per all data among SDGE territory public charging sites (excluding Tesla), <u>the average high-end amount of kW for each public station site</u> is no more than 150 kW, is this close to correct in your opinion? If you, why not, and then what is the answer.

SDG&E Response: SDG&E objects that this question is vague and ambiguous. Subject to and without waiving this objection, SDG&E states that it cannot comment on the site characteristics of public DCFC sites not owned and operated by SDG&E.

67. Tesla appears to own 129 EVES's out of the 228 DCFC chargers, resulting in 56% of DCFC charging are for Tesla owners only in SDGE territory. Thereby, 100 DCFC chargers are available that are the standard SAE CCS combo or Chadmo connector. Do you agree with this information, if not why not and what is the answer?

SDG&E Response: SDG&E objects that this question is vague and ambiguous. Subject to and without waiving this objection, SDG&E states that it cannot comment on the site characteristics of public DCFC sites not owned and operated by SDG&E.

68. Why did you use 100 kW chargers in your use case 5 for the EVSE's as there are no passenger cars and Medium Heavy Duty vehicles that can charge at 100 kW, the current DCFC car charging acceptance is generally 50 kW unless it is a Tesla which accepts over 100 kW. This impacts the results as generally you cannot charge at the rate of 100 kW with passenger cars, can you explain why you used 100 kW. In order to achieve 1 million kWh annually, you would have to be connected 14 hours per day at 50 kW and this equates to a load factor of 58%. Is this an error?

SDG&E Response: SDG&E used 100 kW chargers in the DCFC use case scenario presented in the EV-HP prepared testimony Chapter 3 because the scenarios presented are intended to be illustrative examples, and are not intended to necessarily reflect the current vehicle market.

69. If the car will not accept the 100 kW and your Use Case 5 illustrated a load factor of 29%, how do you achieve 1,027,137 kWh annually?

SDG&E Response: See response to Question 68.

1. How many of the 229 chargers or the 60 sites with DCFC charging produce 100kW or more DC Charger power?

SDG&E Response: SDG&E cannot comment on the site characteristics of public DCFC sites not owned and operated by SDG&E.

2. The data appears to result in the following in the SDGE territory of public fast charging stations:
    1. Electrify American has 4 locations and all four have a 150-kW charger.
    2. Chargepoint has 2 locations with 125 kW chargers.
    3. EVgo has Zero.
    4. Greenlots has Zero.
    5. The Car Dealership and Hotel sites have Zero.
    6. Tesla has 2 locations with 120- and 150-kW chargers.

3. It appears that there are 17 chargers between Chargepoint and Electrify America and 19 by Tesla, resulting in 36 Total chargers that have 100 kW or more currently. Do you agree with this, if not why not and what is the answer?

SDG&E Response: SDG&E cannot comment on the site characteristics of public DCFC sites not owned and operated by SDG&E.

70. How many passenger cars accept 100 kW?

SDG&E Response: SDG&E is not a vehicle manufacture and cannot comment on the attributes of vehicle models.

1. A Tesla is currently available in the USA and is sold in California and accepts over 100kW?

   SDG&E Response: See response to Question 70.

2. Do you know of any other cars that accept over 100 kW that are sold in California and current available?
   1. If yes name each one.

      SDG&E Response: See response to Question 70.

   2. Are these luxury cars in your opinion?

      SDG&E Response: See response to Question 70.

71. How many shuttle, trucks and buses accept 100kW?

SDG&E Response: SDG&E is not a vehicle manufacture and cannot comment on the attributes of vehicle models.

1. Do you know of any that accept over 100 kW?
2. Please provide the make, model and power acceptance.
3. If yes, name each one.

SDG&E Response: See response to Question 71.

72. TOU AP EV waiver rate: How many customers on the TOU AP EV waiver rate currently?

SDG&E Response: SDG&E believes that only one customer is currently receiving the

TOU AP EV waiver.

73. How many commercial EV customer sites do you currently have that are MHD fleet sites?

SDG&E Response: As of 12/30/2019 SDG&E has completed installation of seven commercial EV customer sites in which have MHD fleets through its Priority Review Projects.

1. What rates are they on?

SDG&E Response: Green Shuttle PRP sites are billed on Schedule Public GIR, per D.18-01-024. Other MD/HD EV PRP sites are billed on applicable general service rates.

2. How many EV customers per each rate?

SDG&E Response: As of January 9, 2020 one operational Green Shuttle PRP sites is billed on Schedule Public GIR. The remaining sites are billed on applicable general service rates.

3. How many are from the PR pilot program?

SDG&E Response: All seven of the completed installation are from the Priority Review Pilot Program.

4. How many are from the MHD Pilot program?

SDG&E Response: SDG&E has not begun implementation of its MDHD program.

5. How many complaints have you had from any of these customers regarding the billing from EV charging?

SDG&E Response: SDG&E has not received any complaints from current Priority Review Project customers regarding billing from EV charging. SDG&E has received concerns about billing from potential future MD/HD Program participants.

6. Is the charging separately metered for each customer? If not, how many customers are separately metered?

SDG&E Response: All of the seven completed installations are separately metered, either through a utility meter or load research meter.

7. How many EV commercial MHD customers are NOT separately metered?

SDG&E Response: All of the seven completed installations are separately metered.

8. What is the current lowest monthly load and kW use for a fleet customer? What is their average kWh per month?

SDG&E Response: SDG&E objects that this question seeks confidential customer information. Generally, SDG&E cannot share such information without the consent of each specific customer.

9. What is the current highest monthly load and kW use for a fleet customer? What is their average kWh per month?

SDG&E Response: See response to Question 73.8.

10. What is the current average monthly load and kW use for a fleet customer? What is their average kWh per month? How many months does this apply to?

SDG&E Response: SDG&E is unaware of this information.

11. How many of these EV fleet customers were on a large commercial price plan prior to EV adoption?

SDG&E Response: SDG&E does not have visibility into all EV adoption and is unable to answer how many EV fleet customers are on large commercial price plans prior to EV adoption. Moreover, SDG&E cannot share confidential customer information.

12. How many of these EV fleet customers were on a small commercial price plan prior to EV adoption?

SDG&E Response: SDG&E does not have visibility into all EV adoption and is unable to answer how many EV fleet customers are on small commercial price plans prior to EV adoption.

74. Is the HP rate only an illustrated rate?

SDG&E Response: SDG&E objects that this question is vague and ambiguous. Subject to and without waiving this objection, SDG&E responds as follows:

The EV-HP rate design proposed in the Prepared Direct Testimony of William G. Saxe is not illustrative but the resulting rates based on that proposed rate design and the currently effective Schedule AL-TOU electric rates at the time of the filing (June 1, 2019 rates), presented in Attachment A of this testimony, are illustrative. The EV-HP rates in Attachment A are labeled illustrative because these rates will need to be updated to reflect the rate design adopted by the CPUC in the EV-HP decision and the then current Schedule AL-TOU rates reflecting recovery of SDG&E's CPUC authorized revenue requirements at the time the EV-HP decision is implemented.

75. The Public GIR rate was released in 2019. How much did the rate increase compared to the illustrated rate?

SDG&E Response: The Public GIR rates presented in the Prepared Rebuttal Testimony of Cynthia Fang in the Public GIR proceeding (Application 17-01-020) were illustrative rates based on SDG&E's then current January 1, 2017 electric rates. The current adopted Public GIR rates presented in Schedule Public GIR rates reflect rates effective January 1, 2020. As requested, the table below presents a comparison of the illustrative Public GIR rates presented in the Public GIR proceeding testimony to the current adopted January 1, 2020 Public GIR rates.

PUBLIC GIR RATES			
	Current Rates Effective January 1, 2020 ($/kWh)	**Illustrative Proposed Rates ($/kWh)**	**Difference (%)**
Hourly Total Base Rate	$0.15829	$0.13871	14%
Day-Ahead Hourly D-CPP Rate	$0.24007	$0.18656	29%
Day-Ahead Hourly C-CPP Rate	$0.49287	$0.50535	-2%
Notes:			
(1) Public GIR Current Rates Effective January 1, 2020 are the rates presented in Schedule Public GIR on Sheets 2 and 3.			
(2) Public GIR Illustrative Proposed are the rates presented in the Prepared Direct Testimony of Cynthia Fang in SDG&E Application 17-01-020, Diagram 5-6 on page CF-28. The Illustrative rates are based on the then current rates at the time the direct testimony was filed, which were January 1, 2017 rates.			

76. The facility charges in the AL TOU rate are increasing the GRC-2 rate case proceeding A.1903002, is it likely that the facility rate or the subscription rate will increase similar to the same as the AL TOU in this application. If not, please explain why not.

    SDG&E Response: As explained in the Prepared Direct Testimony of William G. Saxe, the proposed EV-HP rates, including the proposed subscription charge, are based on Schedule AL-TOU rates. For this reason, the Schedule AL-TOU rates that get adopted in SDG&E's 2019 General Rate Case ("GRC") Phase 2 proceeding (A.19-03-002) will impact the proposed EV-HP rates.

    1. What other proceeding rate impact changes are likely to change the illustrated HP rate and increase it since your filed application.

       SDG&E Response: Because the proposed EV-HP rates are based on Schedule AL-TOU, any SDG&E proceedings or SDG&E Advice Letter that changes Schedule AL-TOU rates will similarly change the proposed EV-HP rates. For example, SDG&E filed its "Consolidated Filing to Implement January 1, 2020 Electric Rates" in SDG&E Advice Letter 3487-E to updated rates, including Schedule AL-TOU rates on January 1, 2020.

    2. Can you please update the illustrated rate based on these impacts?

       SDG&E Response: The file provided in response to Question 28 of SDAP DR-01("SDAP DR-01, Question 28") provided the updated illustrative EV-HP rates based on the illustrative rates proposed in SDG&E's 2019 General Rate Case ("GRC") Phase 2 proceeding (A.19-03-002). SDG&E will be filing revised 2019 GRC Phase 2 illustrative rates on January 15, 2020, as required by the November 1, 2019 "Administrative Law Judge's Ruling Directing San Diego Gas & Electric Company to File/Serve Supplemental Information".

77. Did any fleet experts design the SDGE Fleet use cases 1-5? If so, who and please explain the expertise in the field including their background on what commercial vocations and commercial vehicle class size of experience do they have and for how many years.

SDG&E Response: The use cases shown in the EV-HP Chapter 3 prepared testimony are illustrative examples only. SDG&E generally did not consult fleet experts or current customers in choosing these illustrative examples.

78. Regarding your use cases, did you consult with any of your existing fleet customers, if so, who were your resources? Do you have data that was provided to you from your resources, please explain what data was provided?

SDG&E Response: See response to Question 77.

79. Did you consider the Standards for improved future increases in MPG and compare savings to the newest choice of liquid fuel technologies and these improvements, if not , why not?

SDG&E Response: SDG&E objects that this question is vague and ambiguous. It is unclear what "Standards" are being referred to in this question.

80. Has SDGE ever completed installation of DCFC charging stations?

SDG&E Response: SDG&E has completed DCFC installations at Pasha Automotive and San Diego Airport Parking.

1. How many chargers at how many sites?

SDG&E Response: Pasha Automotive has 3 chargers and San Diego Airport Parking has 2 chargers.

2. What is the kW power output of the Charger?

SDG&E Response: Pasha Automotive's 3 chargers output 40 kW, 80 kW, and 100 kW. The San Diego Airport Parking DCFCs output 62.5 kW each or 125kW shared.

3. How long have the sites/chargers been operational?

SDG&E Response: The Pasha Automotive site has been operational since March 4, 2019. The San Diego Airport Parking site has been operational since November 27, 2019.

4. Do you own the station or does the EVSEP or customer?

SDG&E Response: The customer owns and operates the charging stations at Pasha Automotive. SDG&E owns and operates all DCFC stations at San Diego Airport Parking.

5. Describe the customer type: fleet, retail, workplace?

SDG&E Response: Both completed DCFC installations are fleet customers.

6. If able to do so: Who are these customers?

SDG&E Response: Pasha Automotive and San Diego Airport Parking.

81. In the five fleet programs approved from the MHD PR Pilot projects: (provide answer in table)
    1. How many sites were approved in the Decision for each fleet pilot program?
    2. How many vehicles were required per site?
    3. How many sites did SDGE reward for each pilot program?
    4. Please explain how come you did not accomplish the goal or the approved quantity of pilot sites as per the decision?
    5. Do you believe this same impact can repeat in the SR MHD pilot make ready?
        1. If not, why not.

SDG&E Response: SDG&E objects that the question seeks information that is not relevant to this proceeding or likely to lead to the discovery of admissible evidence. Subject to and without waiving this objection SDG&E states that information on the priority review pilots can be found in CPUC's decision (D.18-01-024) and related PAC reporting.