SDAP DATA REQUEST
SDAP-DR 06
Application for Approval of Electric Vehicle High Power Charging Rate (A.19-07-006)
SDG&E RESPONSE
DATE RECEIVED: April 1, 2020
DATE RESPONDED: April 15, 2020

Question 1

It is SDAP's current understanding that the proposed EV-HP subscription charges (e.g., $228 per block of 25 kW) are tied to the distribution Non-coincident Demand ("NCD") Charge in the AL-TOU rate schedule.

Please explain whether the EV-HP subscription charge will be updated whenever the AL-TOU distribution NCD charge is changed.

If the EV-HP subscription charges will not be updated for changes in the AL-TOU distribution NCD charge, please explain how, how often, and on what basis, the EV-HP subscription charge will be updated.

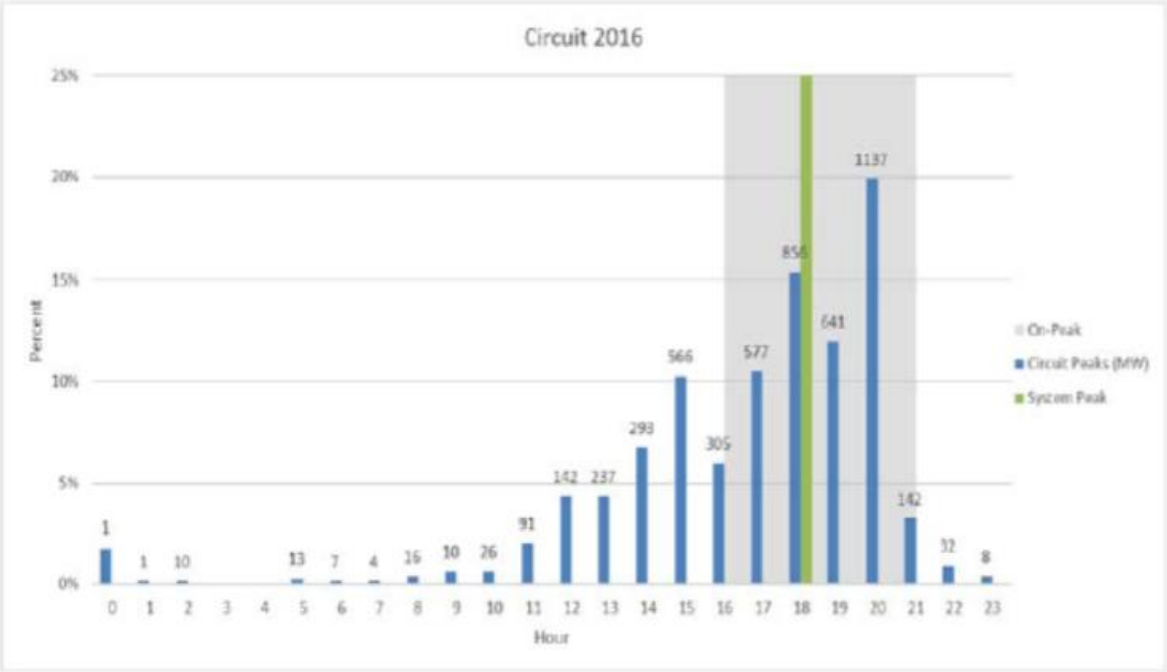
SDG&E Response

Yes, the EV-HP subscription charge will be updated whenever the AL-TOU distribution NCD charge is changed.

Question 2

In the following sub-parts, please refer to the graph below, from SDG&E's May 3, 2019 Supplemental Testimony in A.19-03-002.

Chart 1: SDG&E Circuit Peaks (Time Period)



a. Does SDG&E agree that fewer than 10% of its distribution circuits peak between midnight and 6:00 am? If not, why not?

SDG&E Response

SDG&E objects to the extent that the question is vague or ambiguous as to timing. For the time period displayed in the chart (2016) fewer than 10% of SDG&E's distribution circuits peaked between midnight and 6:00 AM.

b. Does SDG&E agree that marginal distribution costs should vary by time of use? If not, why not?

SDG&E Response

As stated in the testimony of SDG&E witness Saxe, the portion of SDG&E's capacity-driven distribution costs that are on-peak related should be reflected in an on-peak demand charge.

c. Does SDG&E agree that marginal distribution costs should be lower for super-off-peak usage than for off-peak usage? If not, why not?

SDG&E Response

The marginal distribution costs that are capacity-driven should be allocated to the on-peak period. All other costs should be allocated equally among remaining TOU periods, as they do not have a time-varying component.

Question 3

Please refer to Chapter 3 of SDG&E's July 3, 2019 testimony in A.19-07-006, testimony by P. Kodiath, page PK-2. In this testimony, SDG&E describes Use Case 1 as follows:

Table 1: Large MD EV site characteristics
• 20 MD electric trucks per site • Trucks drive 50 miles per weekday • One 20 kW charger per truck, charging concurrently (400 kilowatt ["kW"] maximum) • Trucks charge 12 – 4am

Please consider the following hypothetical "Use Case 1A". In Use Case 1A, the Trucks charge between Noon and 4 pm. Use Case 1A is identical to Use Case 1 except in the time of charging. Utilization and maximum demands are identical in the two cases.

Does SDG&E believe that marginal distribution costs included in a Contribution to Margin ("CTM") analysis for Use Case 1A should be the same as the marginal distribution costs included in a CTM analysis for Use Case 1? Please explain why or why not.

SDG&E Response

SDG&E objects to the extent that this question is speculative or calls for a hypothetical. Notwithstanding and without waiving these objections, based on the SDG&E's direct testimony in its 2019 GRC Phase 2, marginal distribution costs reflect distribution customer and distribution demand costs. The distribution demand costs reflect costs based on the customer's maximum demand regardless of when the demand is used (non-coincident demand costs) and peak demand costs based on demand used from 4 to 9 pm. Based on this proposed testimony, the marginal costs for both Use Case 1 and Use Case 1A would be the same for CTM analysis purposes because both would include the marginal customer and marginal non-coincident demand costs that are not based on when a customer uses energy, and both would exclude the marginal peak demand costs since no demand would be used between SDG&E's on-peak period of 4-9 pm under both Use Case scenarios.

Question 4
Hypothetically, would SDG&E find it reasonable to propose TOU distribution rates in the future? If not, why not?

SDG&E Response
SDG&E objects to the extent that this question calls for speculation and/or attempts to guess at future SDG&E decisions. Notwithstanding and without waiving these objections, SDG&E has existing rate schedules with time-varying components of base distribution. For instance, Schedule AL-TOU has on-peak distribution demand charges. Also, the proposed EV-HP rate recovers the on-peak distribution demand costs through an adder applied to distribution on-peak energy charges.

a. Does SDG&E believe that DA, CCA, and other non-bundled customers should, in the future, be subject to TOU UDC rates? If not, why not?

SDG&E Response
SDG&E objects to the extent this question calls for speculation about future SDG&E opinions. Notwithstanding and without waiving these objections, as stated above, SDG&E has existing rate schedules that have time-varying UDC components. If those schedules are available in the future, customers who meet the eligibility requirement may take service on them.

Question 5

Will the EV-HP Basic Service Fee be updated upon and after the Approval in A.1903002 of an updated AL-TOU basic service fee? (The GRC Phase 2 decision is due before the expected release of the EV-HP Rate).

a. This change will update and likely increase this item due to the following Proposed Rates which will impact the cost per mile in each use case: See, 3-25-20, A.1903002 Revised-3 Testimony, Chapter 3, p.249 or p. 31 of 50 (see attached and below table at Q9)

SDG&E Response

Yes, the EV-HP Basic Service Fee will be updated in parallel with approved changes in the AL-TOU Basic Service Fee.

a. Facility Charge (up to 500 kW): Present $186.30 to Proposed $223.56
b. Facility Charge (over 500 kW): Present $744.64 to Proposed $798.77
c. Do you agree with the above?
    a. If not, why not?

a. Is the proposed Monthly Service Fee (A.1903002, see attached) of $223.56 and $798.77 for over 500 kW in AL TOU going to increase the Billing of the HP Rate?
    a. If not, why not?

SDG&E Response

a) Yes, increases in the EV-HP Basic Service Fee for customers up to 500 kW will increase the cost per mile paid by EV-HP customers.

b) Yes, increases in the EV-HP Basic Service Fee for customers greater than 500 kW will increase the cost per mile paid by EV-HP customers.

c) SDG&E agrees that the Basic Service Fees presented reflect the present and proposed Basic Service Fees in SDG&E's GRC Phase 2 direct testimony.

b) Yes, as stated in response to Question 5 above, any changes in the Basic Service Fee adopted for Schedule AL-TOU will impact the Basic Service Fee proposed for EV-HP since the proposed Basic Service Fee proposed for EV-HP is equal to the Basic Service proposed for AL-TOU.

Question 6

In the HP Revised Rate, the changes reduced the over-all Subscription rate and introduced two other blocks of Subscription Increments in blocks of 10 and 100. This results in 10, 25 and 100 kW Blocks available per Subscription. However, this unfairly burdens the Small business Customer, see below scenario with the following assumptions.

Each customer obtains 10 tranches (Column C) to equate to the Charging kW in column A.

A	B	C	D	E	F	G
KW	Rate	Tranches	Subscription Cost	per kW Rate	Facility Rate	Per kW Rate
100	$37.79	10	$377.90	$3.78	$186.30	$5.64
250	$94.48	10	$944.80	$3.78	$186.30	$4.52
1000	$377.92	10	$3,779.20	$3.78	$744.64	$4.52

c. Do you agree with the price per kW in Column E in each scenario?

a. Do you agree that each scenario ends up with the same price per kW in column E? (d/a=e)

SDG&E Response

Yes, SDG&E agrees that the per kW rate calculated from the EV-HP subscription charge shown in column E is correct.

d. Do you agree that each customer is paying the same fee per kW, column e?

SDG&E Response

Yes, SDG&E agrees that the per kW rate calculated from the EV-HP subscription charge shown in column E is correct.

e. Do you agree that the customer that has the 100 kW of charging when exposed to the Subscription + Facility fees in their billing, has a greater impact in customer charging per kW than when charging at over 150 kW?

SDG&E Response

Yes, SDG&E agrees that the combined Subscription Charge and Basic Service Fee results in a higher per kW rate for the customer with a 100 kW maximum demand shown above than those with higher maximum demand.

f. Do you agree with column G results? G = (D + F) / A

a. If not, why not, please explain?

SDG&E Response

SDG&E objects to the extent that the question is vague or ambiguous. Notwithstanding and without waiving those objections, SDG&E agrees with the results shown in column G above.

g. Do you agree that the customer who falls into the block of under 150 kW will be more impacted by the facility rate that the over 150 kW customers?

a. If not, why not, please explain?

SDG&E Response

SDG&E objects to the extent that the question calls for speculation. Notwithstanding and without waiving this objection, SDG&E agrees that customers with lower maximum demands will pay a higher Basic Service Fee as a percentage of the total.

Question 7

What about Rate Increases including current or other Proposed rates or Releases thru March 2021 that will impact the HP Rate.

h. Have you examined the HP rate against a forecasted declining gas price?

i. Have you examined the HP rates' likely 2021 commercial electric rates given SDG&E's GRC Phase 2?

j. What are the future revenue impacts in $?

k. What are the future release dates for revenue impacts?

l. What is the variance (% and $) of the proposed rate to the actual released rate in Mid 2021 in terms of the increase in each itemized cost that impacts the billing?

a. Please provide in a work paper the billing impacts, each billing component impact and release dates.

SDG&E Response (h. through l.a.)

SDG&E objects to the extent that this question is overly broad and unduly burdensome and/or requests SDG&E to perform analysis that it has not performed. SDG&E also objects to the extent that the question requests SDG&E to continually update its application in contravention of Commission rules. Notwithstanding and without waiving these objections, SDG&E has not performed this analysis.

Question 8
Will the TOU-M rate be updated upon and after the Approval in A.1903002?

a. The HP Interim Rate would be updated to the following Proposed Rates in A.1903002 which impacts the cost per mile in each use case:

a. Facility Charge: $101.56 to $138.48 (See Attached: 3-25-20, A.1903002 Revised-3 Testimony, Chapter 3, p.248 or p. 30 of 50)

b. Demand Fee: $2.22 to $3.44

c. Do you agree with the above?

d. If not, why not and explain?

e. Do you agree that this will impact the cost per mile benefits of the use cases?

f. Are there any other releases or proposed rates or cost that will change the above demand fee in year 2020 or 2021.

SDG&E Response:

SDG&E objects to the extent that this question is duplicative. Notwithstanding and without waiving this objection, the Schedule TOU-M rates will be updated in the future for any applicable rate changes, including a final decision in A.19-03-002, the same as any other rate schedule in the Small Commercial customer class is updated.

a. In Year 1 of SDG&E's GRC Phase 2, SDG&E is proposing to increase the basic service fee for Schedule TOU-M from $101.56 per month to $135.48 per month.

b. In Year 1 of SDG&E's GRC Phase 2, SDG&E is proposing to increase the non-coincident demand charge for Schedule TOU-M from $2.50/kW to $3.44/kW.

c. See responses to 8a and 8b.

d. SDG&E objects to the extent that this question does not reflect accurate information. Notwithstanding and without waiving that objection, SDAP incorrectly presents the GRC Phase 2 proposed basic service fee amount. See response to 8a.

e. Yes, changes in Schedule TOU-M rates will impact the cost per mile paid by EV operators

f. Any changes to distribution revenues for the Small Commercial Customer Class will affect the distribution demand charge rate for Schedule TOU-M, as this rate component varies with revenue requirements, the same as volumetric rates vary with revenue requirements. The SDG&E proposed rates presented in the GRC Phase 2 are illustrative based on 1/1/2020 rates. Therefore, any changes that occur to distribution rates between

1/1/2020 and when the GRC Phase 2 decision is implemented will be reflected in rates. These changes are not specific to Schedule TOU-M; the entire Small Commercial Customer Class will see similar changes.

Question 9

Do you agree that the following table correctly depicts the "change" (including future proposed) to the TOU-M rate components since the Stipulation meeting with all parties that took place on Nov 5, 2019?

a. If not, please correct and provide the answers.

TOU-M Date	Monthly Service Fee	Demand Fee	Existing Rate (on date) or Proposed Rate (per A.1903002 Testimony)	Resource
Jul-19	$101.56	$2.22	Existing	AL 3226-E July 2018, AL 3326-E Jan 2019
Nov-19	$101.56	$2.22	Existing	Nov 5, 2019 Stipulation Workshop for Interim Rate
Jan-20	$101.56	$2.50	Existing	AL 3487-E Jan 1, 2020 AND SDAP DR02-Q7 response by SDGE
Mar-19	$131.89	$2.81	Proposed	3-4-19 A.1903002 Testimony, Chapter 3, p.244 or p.30 of 50
May-19	$131.89	$2.81	Proposed	5-8-19 A.1903002 Revised-1 Testimony, Chapter 3, p.244 or p.30 of 50
Jan 15,2020	$135.48	$3.44	Proposed	1-15-20 A.1903002 Revised-2 Testimony, Chapter 3, p.246 or p.30 of 50
Mar-20	$135.48	$3.44	Proposed	3-25-20 A.1903002 Revised-3 Testimony, Chapter 3, p.248 or p. 30 of 50

SDG&E Response

Yes, the fees identified in the table above for Schedule TOU-M are correct. The existing monthly service fee (referred to as Basic Service Fee in Schedule TOU-M) and demand fee reflect the fees for Schedule TOU-M effective on dates shown. The fees identified for Schedule TOU-M on January 2020 are also the fees currently billed Schedule TOU-M customers. The proposed monthly service fee and demand fee are the Schedule TOU-M fees SDG&E proposed in its 2019 General Rate Case Phase 2 proceeding (A.19-03-002) based on the various filings in that proceeding, as listed.

Question 10

Do you agree that the following table correctly depicts the "change" (including future proposed) to the AL TOU rate components since the HP Application filed on July 3, 2019?

a. If not, please correct and provide the answers.

AL-TOU Date	Monthly Fee Up to 500 kW	Monthly Fee over 500 kW	Existing Rate (on date) or Proposed Rate (per A.1903002 Testimony)	Resource
July 2019 up to 500 kW	$186.30	$744.64	Existing	
Mar-19	$223.56	$764.87	Proposed	3-4-19 A.1903002 Testimony, Chapter 3, p.245 or p.31 of 50
May-19	$223.56	$764.87	Proposed	5-8-19 A.1903002 Revised-1 Testimony, Chapter 3, p.245 or p.31 of 50
Jan 15,2020	$223.56	$798.77	Proposed	1-15-20 A.1903002 Revised-2 Testimony, Chapter 3, p.247 or p.31 of 50
Mar-20	$223.56	$798.77	Proposed	3-25-20 A.1903002 Revised-3 Testimony, Chapter 3, p.249 or p. 31 of 50
Year 2	$268.28	$798.77	Proposed	3-25-20 A.1903002 Revised-3 Testimony, Chapter 3, p.321 or p. 32 of 51

SDG&E Response

Yes, the fees identified in the table above for Schedule AL-TOU are correct. The existing monthly service fee (referred to as Basic Service Fee in Schedule AL-TOU) reflect the monthly service fee for Schedule AL-TOU effective on July 1, 2019. These fees are also the monthly service fees billed Schedule AL-TOU customers today. The proposed monthly serve fees are the Schedule TOU-M fees SDG&E proposed in its 2019 General Rate Case Phase 2 proceeding (A.19-03-002) based on the various filings in that proceeding, as listed.

Question 11
Do you agree that currently in the month of March and April 2020 that the Fuel Prices are dramatically decreasing and the cost of a gallon of fuel is reduced compared to the fuel cost in 2019 or average fuel cost in 2019?

SDG&E response
SDG&E objects that this question is vague and imprecise in terms of what SDG&E is supposed to compare gasoline prices in March and April 2020 against, or what data source SDG&E is supposed to use to make this comparison. Notwithstanding and without waiving this objection, SDG&E generally agrees that the average cost for a gallon of gasoline in March or April 2020 is less than in March or April of 2019, but that gasoline prices continue to fluctuate and SDG&E is not required to continually update its application.

a. Do you agree that based on the current impact of Covid-19 that Transportation and Travel for Airport Shuttles are impacted by Covid-19 and thereby Utilization will be reduced for vehicle miles traveled for a fleet like SDAP?

SDG&E Response
SDG&E objects to the extent that this question seeks information that is in the possession or control of SDG&E. Notwithstanding and without waiving this objection, SDG&E generally agrees that the COVID-19 emergency is impacting airport use.

b. Do you agree that the low Load Factor number will be reduced due to the reduced vehicle miles traveled?

SDG&E Response
SDG&E objects that this question is vague and ambiguous as to what the load factor is being compared to and to the extent this information is in the possession of SDAP.

c. Do you agree that this will create a higher cost per mile when SDAP's fleet miles is reduced by 50% or 80%?
a. If not, why not?

SDG&E Response
SDG&E objects that this question is vague or ambiguous, calls for a hypothetical, and regards information in SDAP's possession or control.

For "Fuel Switching Benefits" as it relates to SB1000 (attached).
If a current customer like SDAP who achieves a current cost per mile of 20 cents using diesel fuel. (Scenario Assumptions are the following: $3.92 cost of fuel and 20 mpg = 20 cent per mile.)

a. Do you agree that SDAP achieves this cost per mile on diesel fuel?
a. If not, why not?

SDG&E Response

SDG&E objects to the extent it asks for information in the possession and control of SDG&E. Notwithstanding and without waiving those objections, assuming that the MPG provided is correct, then yes this is the correct cost per mile.

b. Do you agree that this fuel price includes Taxes?

SDG&E Response

SDG&E objects to the extent that the question is vague or ambiguous or asks for information in the possession and control of SDG&E. Notwithstanding and without waiving those objections SDG&E is not aware if the hypothetical assumption provided above includes taxes.

c. Do you agree that the cost of 20 cents per mile includes Taxes?

SDG&E Response

See response to Question 11.a.

d. Based on SDAP's 20 cent per mile, what rate do you consider would the HP rate need to be for SDAP use case with EV's, to be cost-equivalent to diesel fuel? (SDAP EV Shuttle Vehicle Scenario Assumptions are the following: 118 kWh battery with economy of 1 kWh per mile and range of 118 miles and DC kW site max of 120 kW).

SDG&E Response

SDG&E objects to this question to the extent it is vague and ambiguous and/or as it requests modeling that SDG&E has not performed.

a. Would you agree that in an illustrated Billed kWh amount, the rate would need to be under 19 cents per kWh or less be to result in fuel cost savings relative to the cost of diesel?

b. If not, why not.

SDG&E Response

See response to Question 11.a.d.a.

Question 12
Does the HP Illustrated Rates in Workpaper Chapter 3 and Use cases include Taxes in the Billing Amounts?

SDG&E Response
No, the illustrated rates in the Chapter 3 workpapers do not include taxes and fees on electricity, which vary depending on a customer's location in SDG&E service territory.

a. Do you agree that Taxes can impact the Cost per mile?

SDG&E Response
SDG&E objects to the extent that the question is vague or calls for speculation. Notwithstanding these objections, SDG&E agrees that, generally speaking, fuel and electricity taxes can increase vehicle costs per miles.

b. Do you agree if the cost of fuel for diesel increases, for example, to $4.33 per mile and 100% of the increase was only taxes, that this would impact the cost of the mile?

SDG&E Response
SDG&E objects to the extent that the question calls for a hypothetical or speculation. Notwithstanding and without waiving these objections, in the hypothetical situation described above if the cost of diesel fuel increases then the cost per mile would increase.

c. Do you agree that Taxes create a cost to an end user like SDAP?

SDG&E Response
SDG&E objects to the extent that the question is vague or ambiguous, overbroad, and calls for speculation. Notwithstanding and without waiving this objection, SDG&E generally agrees that taxes constitute a cost.

d. Do you agree that the Taxes that were excluded in your illustrated Billed Amounts in each use case limits the end user to have an accurate cost per mile for Billed kWh?
    a. If not, why not.

SDG&E Response
SDG&E objects to the extent that the question is overbroad. Notwithstanding and without waiving that objection, SDG&E acknowledges that the modeling presented in the prepared testimony of Praem Kodiath consisted of hypothetical illustrative examples, and that applicable taxes and fees (which vary in SDG&E service territory) can affect the cost per mile of electricity as a fuel.

Question 13

Do you agree that long term investments in EV's for fleets require certainty in the cost per mile?

a. If not, why not?

SDG&E Response

SDG&E objects to this question as vague, hypothetical, speculative, and overbroad and would require SDG& to speculate on behalf of all commercial businesses.

b. Is a price benefit in the cost per mile likely to increase adoption?

a. If the answer is NO, why not?

b. If the answer is NO, then explain what will help to increase adoption in terms of the IOU roles

SDG&E Response

SDG&E objects to the extent that the question is overbroad and calls for speculation. Notwithstanding and without waiving that objection, SDG&E believes that there are many factors that drive EV adoption. One, but not the only factor, is the per mile cost of electricity as a fuel.

c. Can price changes frustrate a commitment for a long-term contract?

a. If not, why not?

SDG&E Response

SDG&E objects to this question as vague, overbroad, hypothetical, and calls for a legal conclusion.

d. Do you agree that the price of a MHD EV vehicle is more expensive than Gasoline or Diesel even with rebates and vouchers?

a. If not, why not?

SDG&E Response

SDG&E cannot agree or disagree with this question because, SDG&E is not a vehicle manufacturer and is not aware of the price differentials between all MD/HD EVs and comparable fossil fuel vehicles.

e. If the price to purchase an EV over fossil fuel vehicles is more expensive, which it is, then, do you agree that long term investments in Electric Vehicles, which are assets, requires an operating benefit in order for the fleet to have a savings when switching to EV technology?

a. If not, why not.

SDG&E Response

SDG&E objects to this question as vague, hypothetical, overbroad and calls for speculation.

f. Do you agree when the price per kWh benefits the fleet is it likely to decrease their cost per mile after switching to driving electric?

a. If not, why not?

SDG&E Response
SDG&E objects to this question as vague and hypothetical.

END OF RESPONSE