BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of SAN DIEGO GAS & ELECTRIC COMPANY (U 902-E) for Approval of Electric Vehicle High Power Charging Rate

Application 19-07-006

PREPARED REBUTTAL TESTIMONY OF WILLIAM G. SAXE ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

FEBRUARY 20, 2020



TABLE OF CONTENTS

I.	OVERVIEW AND PURPOSE	1
II.	EV-HP RATES SHOULD BE BASED ON RECOVERY OF TOTAL COSTS	1
III.	CPP-D RATES	2
IV.	PROPOSED CHANGES TO SDG&E'S TOU PERIODS	4
V.	DYNAMIC PRICING RATES	5
VI.	UPDATED PROPOSED EV-HP RATES	5
ATTA	CHMENT A	A-1

PREPARED REBUTTAL TESTIMONY OF

WILLIAM G. SAXE

I. OVERVIEW AND PURPOSE

The purpose of my prepared rebuttal testimony is to respond to the direct testimony submitted by Public Advocates Office ("Cal PA") witness Ben Gutierrez, National Resources Defense Council ("Joint Parties") witness Melissa Whited, EVgo witness R. Thomas Beach, Electrify America witness Jigar J. Shah, Environmental Defense Fund ("EDF") witness James Fine, Small Business Utility Advocates ("SBUA") witness Paul L. Chernick, and San Diego Airport Parking Company ("SDAP") witness Robert D. Levin. Specifically, I will address issues raised by witnesses on the costs and time-of-use ("TOU") periods to use in the development of the Electric Vehicle High Power ("EV-HP") proposed rates, and whether Schedule EECC-CPP-D, Electric Energy Commodity Cost Critical Peak Pricing Default ("CPP-D") commodity rates are appropriate for EV-HP customers. In addition, my rebuttal testimony presents updated illustrative EV-HP proposed rates in Attachment A.

II. EV-HP RATES SHOULD BE BASED ON RECOVERY OF TOTAL COSTS

Various parties argue that the EV-HP rates should only be set to recover marginal costs because the EV-HP load reflects new load.¹ SDG&E disagrees that EV-HP rates should only be based on the recovery of marginal costs. While SDG&E agrees that EV-HP load is new load, the cost to serve new load is no different than the cost to serve existing load. The rates to serve all load, including new load, should be based on recovery of SDG&E's total authorized revenue requirements, handled by applying the Equal Percent Marginal Cost ("EPMC") factor to rates. As Cal PA correctly states, "Full EPMC scaling is essential to the provision of equitable, cost-based rates, because it ensures that all customers pay their fair share of SDG&E's EPMC costs

¹ NRDC Opening Testimony of Melissa Whited, pp. 10-11; EVgo Prepared Direct Testimony of R. Thomas Beach, pp. 5-7; Electrify America Prepared Direct Testimony of Jigar J. Shah, pp. 3 and 23; and SDAP Opening Testimony of Robert D. Levin, pp. 15-16.

(i.e., costs that do not vary based on customer usage or load, or the number of customers) rather than pushing a disproportionate share of these costs onto some customers while exempting or mitigating other customers' share of revenue responsibility."²

SDG&E understands that certain changes to the proposed EV-HP rate development may be needed to achieve the State policy goal to accelerate transportation electrification ("TE"). For this reason, as addressed in the rebuttal testimony of SDG&E's witness Brittany Applestein Syz, SDG&E is proposing changes to the EV-HP subscription charge proposed in its direct testimony to address the issue raised by other parties in this proceeding regarding the level of costs to recover in EV-HP rates.³ Specifically, under SDG&E's revised subscription charge proposal, SDG&E will initially set the subscription charge to only recover marginal distribution costs and phase-in recovery of EPMC distribution costs in the subscription charge over ten years.

Attachment A, page 2, presents the illustrative proposed subscription charges over the ten-year period under this proposal based on recovery of distribution costs currently recovered in SDG&E's February 1, 2020 rates.

III. CPP-D RATES

Electrify America and SDAP argue that CPP-D is not appropriate for EV-HP customers because these customers will have difficulty responding to CPP Events. These parties recommend that EV-HP customers be allowed to take commodity service on an all energy rate without being subject to the higher prices during CPP Events.⁴

² Cal PA Prepared Testimony of Ben Gutierrez, p. 1-14, lines 15-19.

³ SDG&E Rebuttal Testimony of Brittany Applestein Syz, Section I.C.

⁴ Electrify America Prepared Direct Testimony of Jigar J. Shah, pp. 5 and 22; and SDAP Opening Testimony of Robert D. Levin, pp. 13 and 63.

Consistent with the Medium/Large Commercial & Industrial ("M/L C&I") customer class, SDG&E proposes that CPP-D be the default rate for EV-HP customers, which means EV-HP customers have the option to opt-out to the standard non-CPP commodity rate for M/L C&I customers, which are the Schedule EECC, Electric Energy Commodity Cost ("EECC") rates for Schedule AL-TOU customers. Unlike the standard non-CPP commodity rates for M/L C&I customers, CPP-D does not have a demand charge since the higher CPP-D Event Day \$/kWh energy prices are designed to recover the same commodity capacity costs recovered in the EECC on-peak demand charge. For this reason, any EV-HP customer on CPP-D that chooses to have 100% of their load served on CPP-D rates (i.e., chooses 0% for the Capacity Reservation Charge ["CRC"]), will have their load served on 100% commodity energy charges, as parties are requesting.

Electrify America and SDAP argue that the CPP-D rate will be problematic for EV-HP customers since it will force these customers not to charge during CPP Events to avoid the higher energy prices. While SDG&E understands this concern, the number of CPP Event hours is very minimal. As stated in Schedule EECC-CPP-D, Special Condition 12, CPP-D Events can be called a maximum of 18 times per calendar year and the CPP-D Event hours only cover four hours from 2 p.m. to 6 p.m. This means that the EV-HP customers, like all M/L C&I customers on CPP-D, would need to respond to a maximum of 72 hours per calendar year, or 0.82% of total annual hours, when SDG&E calls CPP-D Events to maintain reliability on SDG&E's electric system. Moreover, since CPP-D was first introduced in 2008, the number of CPP-D Events that have been called per calendar year has ranged between 0 and 8 and averaged around 4 CPP-D Events per calendar year, equating to approximately 14 CPP-D Event hours a calendar year, which is 0.16% of total annual hours.

SDG&E believes that all customers, including EV-HP customers, should be provided incentives to manage their electric loads during high cost periods to reduce their bills and to help maintain the reliability on SDG&E's electric system. This is the reason that CPP-D was introduced as a commodity rate option for M/L C&I customers. The EV-HP rate design proposed in this proceeding eliminated demand charges since SDG&E understands that demand charges could hinder the acceleration of TE adoption in SDG&E's service territory, and it is important to provide incentives at this stage of TE. Since customers on CPP-D that select zero CRC will avoid commodity demand charges, SDG&E believes that CPP-D is a rate option with reasonable incentives for EV-HP customers. In addition, like all M/L C&I Customers, EV-HP customers will also have the option to opt out of CPP-D and take commodity service on Schedule EECC (AL-TOU rates), which has on-peak demand charges to recover commodity capacity costs. Consistent with SDG&E's proposal for the Schedule EECC-CPP-D commodity rates, SDG&E proposes that the optional Schedule EECC (AL-TOU) commodity rates for EV-HP customers also reflect a \$0.03/kWh reduction in the super off-peak energy charge and around a \$0.04/kWh increase in the on-peak energy charge to provide an additional incentive for EV-HP customers to charge during the super off-peak period.⁵

IV. PROPOSED CHANGES TO SDG&E'S TOU PERIODS

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

EDF, SBUA and SDAP proposed new TOU periods for EV-HP customers.⁶ As stated in SDG&E's witness Brittany Applestein Syz's rebuttal testimony, SDG&E does not support the creation of new TOU periods for EV-HP customers due to the potential for customer confusion.⁷

⁵ Prepared Direct Testimony of William G. Saxe, p. WS-5, line 2 through p. WS-6, line 5.

⁶ EDF Opening Testimony of James Fine, pp. 10-11; SBUA Direct Testimony of Paul L. Chernick, pp. 3 and 13; and SDAP Opening Testimony of Robert Levin, pp. 12-14.

⁷ SDG&E Rebuttal Testimony of Brittany Applestein Syz, Section II.A.

TOU period changes are normally handled in General Rate Case ("GRC") Phase 2 proceedings where marginal commodity costs studies are performed to support the proposed TOU periods and the resulting commodity costs based on those TOU periods. SDG&E's current TOU periods were adopted in Decision ("D.") 17-08-030 for SDG&E's 2016 GRC Phase 2, which was implemented on December 1, 2017. Accordingly, SDG&E disagrees with proposals to change TOU periods in this proceeding without having the proper cost study support for the proposed TOU periods and the commodity costs based on those TOU periods.

V. DYNAMIC PRICING RATES

EDF recommends that SDG&E be required to develop and propose a new dynamic pricing rate option for SDG&E's commercial EV customers in a future Application. SDG&E agrees with EDF that commercial EV customers should have the option to take electric service on a dynamic pricing rate. For this reason, SDG&E agrees to propose a dynamic pricing rate for commercial EV customers in a future SDG&E GRC Phase 2 or Rate Design Window ("RDW") Application filed after the Commission issues a decision adopting the Final Transportation Electrification Framework ("TEF").

VI. UPDATED PROPOSED EV-HP RATES

Attachment A presents the updated illustrative EV-HP proposed rates. The updated illustrative EV-HP rates are based on SDG&E's current rates⁹ and the revision to the proposed EV-HP subscription charge and subscription increments as proposed by SDG&E witness Brittany Applestein Syz¹⁰ and discussed in Section II above.

⁸ EDF Opening Testimony of James Fine, pp. 6-10.

⁹ SDG&E current electric rates effective February 1, 2020, per SDG&E Advice Letter 3500-E.

¹⁰ SDG&E Rebuttal Testimony of Brittany Applestein Syz, Section I.C.

1	

This concludes my prepared rebuttal testimony.

ATTACHMENT A

ILLUSTRATIVE PROPOSED EV-HP RATES

ATTACHMENT A EV-HP PROPOSED RATES

Line No.	DESCRIPTION (A)	UNITS (B)	TRANSMISSION RATE (C)	DISTRIBUTION RATE (D)	PPP RATE (E)	NUCLEAR DECOMMISSION RATE (F)	CTC RATE (G)	LGC RATE (H)	RS RATE (I)	TRAC RATE (J)	GHG RATE (K)	TOTAL UDC RATE (L)	DWR BOND RATE (M)	EECC RATE (N)	DWR Credit (O)	TOTAL RATE (P)
1	SCHEDULE EV-HP															
2	Subscription Charge (£150 kW maximum demand): 10 kW Increments - Year 1															
3	Secondary	\$/Month		\$37.79												\$37.79
4	Primary	\$/Month		\$37.55												\$37.55
6	Subscription Charge (151 - 500 kW maximum demand): 25 kW Increments - Year 1															
7	Secondary	\$/Month		\$94.48												\$94.48
8	Primary	\$/Month		\$93.89												\$93.89
9	,	************		*												******
10	Subscription Charge (>500 kW maximum demand): 100 kW Increments - Year 1															
11	Secondary	\$/Month		\$377.92												\$377.92
12	Primary	\$/Month		\$375.54												\$375.54
13 14	Basis Cassina Fas															
15	Basic Service Fee Less than or equal to 500 kW															
16	Secondary	\$/Month		\$186.30												\$186.30
17	Primary	\$/Month		\$50.24												\$50.24
18	,	•		• • • • • • • • • • • • • • • • • • • •												• • • • • • • • • • • • • • • • • • • •
19	Greater than 500 kW															
20	Secondary	\$/Month		\$744.64												\$744.64
21	Primary	\$/Month		\$59.77												\$59.77
22	5 0															
23 24	Energy Charges On-Peak Energy: Summer															
25	Secondary	\$/kWh	\$0.02227	\$0.19055	\$0.01356	\$0.00005	\$0.00089	\$0.00720	\$0.00004	\$0.00000	\$0.00000	\$0.23456	\$0.00580	\$0.17710	-\$0.00008	\$0.41738
26	Primary	\$/kWh	\$0.02227	\$0.17541	\$0.01356	\$0.00005	\$0.00089	\$0.00720	\$0.00004	\$0.00000	\$0.00000	\$0.21942	\$0.00580	\$0.17624	-\$0.00008	\$0.40138
27	,	********	*****	***********		*********	********	*******		*********	*********	****	********	*******	*********	***********
28	Off-Peak Energy: Summer															
29	Secondary	\$/kWh	\$0.02227	\$0.00068	\$0.01356	\$0.00005	\$0.00089	\$0.00720	\$0.00004	\$0.00000	\$0.00000	\$0.04469	\$0.00580	\$0.11079	-\$0.00008	\$0.16120
30	Primary	\$/kWh	\$0.02227	\$0.00068	\$0.01356	\$0.00005	\$0.00089	\$0.00720	\$0.00004	\$0.00000	\$0.00000	\$0.04469	\$0.00580	\$0.11028	-\$0.00008	\$0.16069
31 32	Super Off-Peak Energy: Summer															
33	Secondary	\$/kWh	\$0.02227	\$0.00068	\$0.01356	\$0.00005	\$0.00089	\$0.00720	\$0.00004	\$0.00000	\$0.00000	\$0.04469	\$0.00580	\$0.05489	-\$0.00008	\$0.10530
34	Primary	\$/kWh	\$0.02227	\$0.00068	\$0.01356	\$0.00005	\$0.00089	\$0.00720	\$0.00004	\$0.00000	\$0.00000	\$0.04469	\$0.00580	\$0.05460	-\$0.00008	\$0.10501
35	,															
36	On-Peak Energy: Winter															
37	Secondary	\$/kWh	\$0.02227	\$0.19055	\$0.01356	\$0.00005	\$0.00089	\$0.00720	\$0.00004	\$0.00000	\$0.00000	\$0.23456	\$0.00580	\$0.15070	-\$0.00008	\$0.39098
38	Primary	\$/kWh	\$0.02227	\$0.17541	\$0.01356	\$0.00005	\$0.00089	\$0.00720	\$0.00004	\$0.00000	\$0.00000	\$0.21942	\$0.00580	\$0.15001	-\$0.00008	\$0.37515
39 40	Off-Peak Energy: Winter															
41	Secondary	\$/kWh	\$0.02227	\$0.00068	\$0.01356	\$0.00005	\$0.00089	\$0.00720	\$0.00004	\$0.00000	\$0.00000	\$0.04469	\$0.00580	\$0.10018	-\$0.00008	\$0.15059
42	Primary	\$/kWh	\$0.02227	\$0.00068	\$0.01356	\$0.00005	\$0.00089	\$0.00720	\$0.00004	\$0.00000	\$0.00000	\$0.04469	\$0.00580	\$0.09976	-\$0.00008	\$0.15017
43	,															
44	Super Off-Peak Energy: Winter															
45	Secondary	\$/kWh	\$0.02227	\$0.00068	\$0.01356	\$0.00005	\$0.00089	\$0.00720	\$0.00004	\$0.00000	\$0.00000	\$0.04469	\$0.00580	\$0.05610	-\$0.00008	\$0.10651
46	Primary	\$/kWh	\$0.02227	\$0.00068	\$0.01356	\$0.00005	\$0.00089	\$0.00720	\$0.00004	\$0.00000	\$0.00000	\$0.04469	\$0.00580	\$0.05582	-\$0.00008	\$0.10623
47 48	CPP Adder															
48 49	Secondary	\$/kWh												\$1.97716		\$1.97716
50	Primary	\$/kWh												\$1.97503		\$1.97503
51														\$1.07 000		Ţ
52	CPP Capacity Reservation Charge															
53	Secondary	\$/kW												\$5.02		\$5.02
54	Primary	\$/kW												\$5.01		\$5.01

Note: rates based on Schedule AL-TOU current rates effective February 1, 2020 per SDG&E Advice Letter 3500-E.

1 of 2

ATTACHMENT A SUBSCRIPTION CHARGE 10 YEAR PHASE-IN

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	<u>Year 10</u>
Subscription Charge (≤150 kW maximum demand): 10 kW Increments: Secondary Primary	\$37.79	\$44.37	\$50.95	\$57.54	\$64.12	\$70.70	\$77.28	\$83.86	\$90.45	\$97.03
	\$37.55	\$44.10	\$50.65	\$57.19	\$63.74	\$70.29	\$76.84	\$83.39	\$89.94	\$96.48
Subscription Charge (151 - 500 kW maximum demand): 25 kW Increments: Secondary Primary	\$94.48	\$110.94	\$127.39	\$143.85	\$160.30	\$176.76	\$193.21	\$209.67	\$226.12	\$242.58
	\$93.89	\$110.26	\$126.63	\$143.00	\$159.37	\$175.74	\$192.11	\$208.48	\$224.85	\$241.22
Subscription Charge (>500 kW maximum demand): 100 kW Increments Secondary Primary	\$377.92	\$443.74	\$509.57	\$575.39	\$641.21	\$707.03	\$772.85	\$838.67	\$904.49	\$970.31
	\$375.54	\$441.02	\$506.50	\$571.99	\$637.47	\$702.95	\$768.43	\$833.92	\$899.40	\$964.88

Note: rates based on Schedule AL-TOU current rates effective February 1, 2020 per SDG&E Advice Letter 3500-E.

Rebuttal Testimony of William G. Saxe, Attachment A