Rulemaking: <u>22-07-005</u> (U 39 E) Exhibit No.: <u>(PG&E-01-E)</u> Date: <u>May 1, 2023</u> Witness(es): Colin Kerrigan

# PACIFIC GAS AND ELECTRIC COMPANY

# ELECTRIC RATES DEMAND FLEXIBILITY

# ORDER INSTITUTING RULEMAKING

# ERRATA TESTIMONY (REDLINE VERSION OF CHAPTER 1)

# PG&E-SPECIFIC IMPLEMENTATION OF INCOME GRADUATED FIXED CHARGE



# PACIFIC GAS AND ELECTRIC COMPANY ELECTRIC DEMAND FLEXIBILITY OIR

## Corrections to Testimony for April 7, 2023, Electric Demand Flexibility OIR

The revised testimony contains updates to PG&E's supplemental testimony submitted on April 7, 2023, specifically Chapter 1 "PG&E Income Graduated Fixed Charge Rate Design Results," and replaces all of Exhibit PG&E-01 submitted on April 7 in its entirety. PG&E is submitting revisions pursuant to the April 18, 2023, ruling from Administrative Law Judge Stephanie Wang to correct certain errors within the Track A Public Fixed Charge Tool. In addition, PG&E is also including corrections to Table 1-4 due to a pasting error in some of the rows.

Chapter Number / Appendix	Witness Name	Page No.	Line No.	As Filed	As Corrected
1	Colin Kerrigan	1-8	Table 1-4, Lines 3-6	Summer Off Peak: \$0.2005 Winter Peak: \$0.3431 Winter Part Peak: \$0.3275 Winter Off Peak: \$0.1986	Summer Off Peak: \$0.1879 Winter Peak: \$0.2413 Winter Part Peak: \$0.2282 Winter Off Peak: \$0.1820
1	Colin Kerrigan	1-14	Line 9	\$1,535	\$1,536
1	Colin Kerrigan	1-15	Figure 1-3	Impact, Existing Rate: \$799 Adopter, Existing Rate: \$4,575 IGFC Electric Bill Impact: \$(1,062) Adopter, Proposed Rates: \$3,512	Impact, Existing Rate: \$781 Adopter, Existing Rate: \$4,556 IGFC Electric Bill Impact: (\$1,057) Adopter, Proposed Rates: \$3,500
1	Colin Kerrigan	1-15	Figure 1-4	Impact, Existing Rate: \$522 Adopter, Proposed Rates: \$3,066	Impact, Existing Rate: \$523 Adopter, Proposed Rates: \$3,065

# PACIFIC GAS AND ELECTRIC COMPANY CHAPTER 1 PG&E INCOME GRADUATED FIXED CHARGE RATE DESIGN RESULTS

### PACIFIC GAS AND ELECTRIC COMPANY CHAPTER 1 PG&E INCOME GRADUATED FIXED CHARGE RATE DESIGN RESULTS

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1			PACIFIC GAS AND ELECTRIC COMPANY					
2			CHAPTER 1					
3	PG&E INCOME GRADUATED FIXED CHARGE RATE DESIGN							
4			RESULTS					
5	Α.	PG	6&E Rate Design					
6		1.	Introduction					
7			This chapter is part of a supplemental Pacific Gas and Electric Company					
8			(PG&E)-specific Exhibit PG&E-01 that accompanies the Joint					
9			Investor-Owned Utilities (IOU) exhibit's chapter on proposed rate design					
10			structure for the income graduated residential fixed charge (IGFC). The					
11			California Public Utilities Commission (CPUC or Commission) must					
12			authorize IGFCs for all IOUs, large and small, by July 1, 2024, that comply					
13			with the statutory requirements adopted through Assembly Bill (AB) 205 in					
14			June 2022. This chapter provides PG&E specific rate design proposals					
15			alluded to in the Joint IOU Opening Testimony. <sup>1</sup> For ease of comparison,					
16			this chapter shares the same outline as the Joint Exhibit's rate design					
17			chapter. However, not all sections require IOU-specific considerations.					
18			Notable PG&E-specific proposals include:					
19			Changes to PG&E's currently available electric vehicle rate schedule					
20			EV2 distribution time-of-use (TOU) differentials, and					
21			• Contingent proposal for the E-ELEC fixed charge to be higher than the					
22			default IGFC in certain circumstances.					
23		2.	Basis for the Average Income Graduated Fixed Charge Level					
24			Distribution					
25			In addition to the universally-applicable categories for distribution costs					
26			(i.e., Marginal Customer Access and other Non-Marginal Costs), PG&E					
27			proposes that its IGFC also recover Distribution – MDCC Primary New					
28			Business costs. While this marginal cost is calculated on a \$/kilowatt (kW)					
29			level, it reflects costs that are incurred when a customer connects to the grid					
30			based on required load and meets the definition of a fixed cost because it					

1 Ex. Joint IOUs-01, Chapter 2, Rate Design.

1does not vary with changes in the volume of electricity a customer2consumes. This is aligned with its longstanding exclusion from being3considered an "avoidable cost" with changes in customer demand in the4CPUC's Avoided Cost Calculator (ACC).<sup>2</sup> While, in theory, a demand5charge could be the most cost-based way to recover such costs, a fixed6charge is the next best choice and more appropriate for residential7customers to replace the current recovery through volumetric rates.

8 **Non-Bypassable Charges (NBC):** PG&E does not propose to collect 9 any NBCs beyond those addressed in the joint testimony (Public Purpose 10 Programs, Nuclear Decommissioning, and New System Generation Charge) 11 through the IGFC. These NBCs are intended to collect costs that do not 12 vary according to usage and are required by state policy; therefore, they are 13 better collected through the progressive IGFC mechanism than through 14 volumetric rates as is currently done.

However, while the current Nuclear Decommissioning NBC is proposed 15 to be collected through the IGFC, as stated in the Joint IOUs' Opening Brief 16 on AB 205 statutory interpretation issues,<sup>3</sup> PG&E believes Public Utilities 17 Code Section § 712.8(f)(5) requires the additional charges to fund continued 18 19 operation of Diablo Canyon be collected through "a volumetric payment." Other parties disputed this interpretation in reply briefs. Given that this 20 component has not yet been proposed to be collected through rates, the 21 question of whether this prospective charge can be collected through the 22 IGFC should be addressed if/when those charges are proposed to be 23 collected, not in this proceeding. 24

25 Electrification Incentive Adjustment (EIA): The EIA is a proposed 26 mechanism by SDG&E to have a revenue neutral fixed charge adder and 27 volumetric rate credit that allows a specific volumetric rate target to be

Only "Primary Capacity" and "Secondary Capacity" are used within the ACC, not "New Business." This has been longstanding practice in the ACC and has remained through multiple fully litigated decisions on distribution avoided cost methodologies. 2022 Distributed Energy Resources Avoided Cost Calculator Documentation (June 22, 2022), version 1a, p. 50: <<u>https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/demand-side-management/acc-models-latest-version/2022-acc-documentation-v1a.pdf> (as of Mar. 27, 2023).</u>

**<sup>3</sup>** Joint Utility Opening Brief on Statutory Interpretation Questions Posed by December 9, 2022, Ruling (Jan. 23, 2023), p. 26.

achieved. This is akin to the present "Conservation Incentive Adjustment"
charge used to increase volumetric rates above baseline and reduce
volumetric rates below baseline. While PG&E is not proposing to include
the EIA in its IGFC, PG&E's proposal still leaves a significant gap between
volumetric rates and marginal costs as estimated by two related CPUC
approved methodologies. PG&E would support the use of the EIA
mechanism as a transparent manner of further reducing that gap.

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### 3. Overall IGFC Level

9 As calculated using the fixed charge spreadsheet tool developed by Energy and Environmental Economics (E3) ("Public Tool"), the 10 11 PG&E-specific IGFC would average about \$53 across all residential 12 customer types. Under AB 205, the CPUC must authorize at least three different levels of fixed charges, with low-income customers paying less than 13 PG&E's above-stated average (referred to below as a "discounted" fixed 14 15 charge), and with high income customers paying more than PG&E's average. No customer pays precisely the average fixed charge level, 16 though the moderate-income bracket pays only slightly less than the 17 18 average. Customers receiving fixed charge prices below the default level (Income Bracket 4 fixed charge) are considered to have a partially or more 19 fully discounted fixed charge to result in the four-bracket income graduated 20 21 fixed charge structure proposed by the Joint IOUs in the Joint Exhibit. 22 Table 1-1 below shows each income category's contribution to the overall fixed charge level, along with what percentage of customers are expected to 23 24 pay that level of fixed charge based on data in the Public Tool.

#### TABLE 1-1 PROPOSED FIXED CHARGE LEVELS BY INCOME BRACKET

Line No.	Bracket Description	Income Threshold, 3 Person Household	% Of Customers	Monthly Income Graduated Fixed Charge
1	Very Low (<100% FPL CARE)	\$23k	14%	\$15
2	Low (Other CARE/FERA)	\$58k	15%	\$30
3	Moderate (Non-CARE <650% FPL)	\$150k	47%	\$51
4	High (>650% FPL)	>\$150k	25%	\$92

## 1

# 4. Income Graduated Fixed Charge Discount Levels

2 AB 205 requires that the fixed charge discount be set "so that a low-income ratepayer in each baseline territory would realize a lower 3 average monthly bill without making any changes in usage." The Joint 4 5 Utilities' Exhibit interprets this to mean that the average low-income customer in each baseline territory must realize at least some bill savings as 6 7 a result of the IGFC implementation relative to current rate design. In 8 practice, this means that the required discount level is informed by the amount of bill savings realized by low-income customers in the lowest 9 baseline usage territory (where average household usage is the lowest). 10 11 PG&E's lowest usage climate zone is Baseline Territory T (covering the coastal zone and including major cities such as San Francisco and 12 Oakland). The average usage of California Alternate Rates for Energy 13 (CARE) customers in Baseline Territory T is approximately 340 kilowatt-hour 14 (kWh) per month, as shown in the Public Tool. At the \$53 average fixed 15 charge level, CARE volumetric rate reduction is about \$0.08/kWh, implying 16 an average volumetric bill reduction of approximately \$27/month.<sup>4</sup> This 17 means that the average low-income customer's fixed charge must be no 18 19 more than that level. With this in mind, PG&E proposes that the average fixed charge for low-income customers as a group be set below this 20 21 threshold. We further divide this group in order to provide lower fixed charges to customers with incomes less than 100 percent of Federal 22 Poverty Level (FPL), resulting in customers below that threshold paying \$15 23 per month, and customers above that threshold paying \$30 per month. The 24 Public Tool's estimates of bill impacts demonstrate that this has the 25 26 expected effect of reducing average bills for low-income households. This 27 holds true for low-income customers in Baseline Territory T on average, as required by statute. However, Income Bracket 2 customers do see a 28 29 modest bill increase on average in this territory. Because these customers 30 also benefit from the changes to NBC exemptions required by AB 205

**<sup>4</sup>** While the actual impact on bills is slightly more complex than this due to the impact of baseline credits, this provides an approximation of the effect.

(negating some of the \$4 monthly bill increase), this is a reasonable
 outcome.

Line No.	Baseline Territory	<100% FPL CARE	Other CARE	All CARE
1	All PG&E	\$(25)	\$(10)	\$(17)
2	Р	\$(42)	\$(27)	\$(36)
3	Q	\$(34)	\$(18)	\$(27)
4	R	\$(35)	\$(19)	\$(26)
5	S	\$(31)	\$(15)	\$(22)
6	Т	\$(11)	\$4	\$(4)
7	V	\$(19)	\$(4)	\$(14)
8	W	\$(34)	\$(17)	\$(24)
9	Х	\$(19)	\$(4)	\$(11)
10	Y	\$(36)	\$(21)	\$(30)
11	Z	\$(24)	\$(9)́	\$(21)

TABLE 1-2
MONTHLY BILL IMPACTS OF IGFC ON CARE CUSTOMERS ON E-TOU-C

5.	Impact of	the IGFC on	Rates and	<b>Other Rate</b>	Design Issues
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## a. Impact of the IGFC on Volumetric Rates

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#### 1) Most Rates should have an Equal Cents Reduction

PG&E proposes that, for most of its residential rates (namely, Schedules E-1, E-TOU-C, E-TOU-D, and E-ELEC), the revenue from fixed charges be applied by means of an equal-cent-per-kWh reduction in the underlying volumetric rates, as none of the costs proposed to be collected through the fixed charge are currently time-differentiated on these rates. The Schedule EV2 rate requires additional consideration as described below.

13Schedules E-TOU-C and E-1 currently have two tiers such that14the rates for usage above the Baseline Quantity (i.e., Tier 2 rates)15are approximately 25 percent higher than Tier 1 rates.16implemented in the underlying tariffs as the "Conservation Incentive17Adjustment." PG&E is not proposing here to change the 1.25:1 tier

<sup>5</sup> The current ratio between Tier 2 and 1 volumetric rates is slightly less than 1.25:1 due to the requirement to use "composite tier" treatment for the revenue from the minimum bill. Per AB 205, this is now disallowed by statute, and future rates will have a ratio exactly at 1.25:1.

ratio adopted by D.15-07-001, but we do note that the overall 1 reduction in volumetric rates due to implementing the new IGFC per 2 AB 205 will result in the \$/kWh difference between Tier 1 and Tier 2 3 rates decreasing compared to its current level. This will mean that 4 5 while the underlying un-tiered volumetric rate (i.e., before applying the Conservation Incentive Adjustment) is reduced on an equal 6 cents basis, the actual Tier 1 rates will decrease by less than this 7 8 amount, and the actual Tier 2 rates will decrease by slightly more than this amount. This is reasonably reflected in the rate values 9 calculated by the Public Tool. 10 2) EV2 Distribution Rates Should be Adjusted on an Equal percent 11

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# EV2 Distribution Rates Should be Adjusted on an Equal percent Basis

PG&E's current Schedule EV2 rate was established by 13 14 D.18-08-013 as the result of a settlement agreement. It features 15 TOU differentials for the distribution rate component that are higher than the TOU differentials in the underlying marginal costs in order 16 to achieve low off-peak volumetric rates. This departure from 17 18 marginal cost rate design principles was undertaken as a policy measure to support transportation electrification. This solution was 19 reasonable at the time. However, if the Joint IOUs' proposed IGFC 20 21 is implemented, an equal-cents distribution rate reduction from 22 PG&E's IGFC would make the EV2 off-peak distribution rates negative by a significant margin. There are situations in which a 23 rate component being negative may be appropriate.<sup>6</sup> However, the 24 purpose of the artificially high TOU differentials for EV2 was to 25 provide low off-peak rates. This is less necessary in the context of 26 fixed charges being implemented on the rate, and there is no basis 27 to "double down" on providing yet lower distribution rates to maintain 28 an arbitrary TOU differential. Further, having such large implicit 29 30 subsidies for off-peak usage conflicts with both PG&E rate design practice and the CPUC's proposed Rate Design Principles No. 8 31

**<sup>6</sup>** For example, when PG&E had separate rate schedules for CARE customers, distribution rates could be negative due to the whole bill CARE discount being provided through reductions to the distribution rate component.

1	(Rates should avoid cross-subsidies that do not transparently and
2	appropriately support explicit state policy goals) and No. 9 (Rate
3	design should not be technology-specific and should avoid creating
4	unintended cost-shifts). <sup>7</sup> So that the EV2 distribution rates remain
5	reasonable, PG&E proposes to instead adjust its EV2 distribution
6	rate on an equal percent basis instead of an equal cents per kWh
7	basis, as shown in Table 1-3 below.

# TABLE 1-3IGFC ADJUSTMENT FOR EV2 DISTRIBUTION RATE

Line No.	Rate Component	Status Quo EV2 Distribution Rate	With Equal Cents Reduction	With Equal percent Reduction
1	Summer Peak	\$0.2465	\$0.1559	\$0.0385
2	Summer Part Peak	\$0.1807	\$0.0901	\$0.0282
3	Summer Off Peak	\$0.0198	\$(0.0708)	\$0.0031
4	Winter Peak	\$0.1763	\$0.0856	\$0.0275
5	Winter Part Peak	\$0.1721	\$0.0814	\$0.0269
6	Winter Off Peak	\$0.0268	\$(0.0638)	\$0.0042

Note: Values taken from "Rate Design Detail" tab of the Public Tool, where "Equal percent Reduction" is instead described as "Constant Ratio."

8	The above-stated adjustments result in the overall EV2 rates
9	shown in Table 1-4 below. Regardless of the level of the final IGFC
10	approved by the CPUC, it is essential to apply the adjustment on an
11	equal percent basis, as even a fixed charge that only included
12	Equal percent of Marginal Cost (EPMC) scaled marginal customer
13	access costs would push EV2 off peak-rates below zero if the
14	reduction were made on an equal-cents-per-kWh basis. This
15	proposed change is intended as a minimally intrusive adjustment to
16	ensure EV2 remains in compliance with PG&E's and the CPUC's
17	rate design principles upon implementation of the proposed fixed
18	charge. The settlement agreement adopted by D.18-08-013 stated
19	that EV2 "will remain available with the TOU periods and rate
20	differentials established in this proceeding until it is re-evaluated in a

<sup>7</sup> Proposed Decision Adopting Electric Rate Design Principles and Demand Flexibility Design Principles (March 17, 2023), Attachment A, p. 3.

1	future rate proceeding that will occur no sooner than the 2021 Rate
2	Design Window proceeding, or no later than Phase II of the 2023
3	GRC Phase II." <sup>8</sup> This proceeding is an appropriate place to make
4	changes to the EV2 rate design; however, we believe a more holistic
5	examination of EV2 beyond this stopgap measure should be
6	conducted in PG&E's next GRC Phase II proceeding, which is
7	currently scheduled to be filed in September 2024.

# TABLE 1-4 PROPOSED CHANGE TO EV2 VOLUMETRIC RATES UPON IMPLEMENTATION OF IGFC

Line No.	Rate Component	Status Quo EV2 Rate (Actual)	Status Quo EV2 Rate (Model)	Proposed EV2 Rate (Model)
1	Summer Peak	\$0.5542	\$0.5531	\$0.3091
2	Summer Part Peak	\$0.4437	\$0.4426	\$0.2542
3	Summer Off Peak	\$0.2417	\$0.2406	\$ <del>0.2005</del> <u>0.1879</u>
4	Winter Peak	\$0.4271	\$0.4260	\$ <del>0.3431</del> 0.2413
5	Winter Part Peak	\$0.4104	\$0.4093	\$ <del>0.3275</del> 0.2282
6	Winter Off Peak	\$0.2417	\$0.2406	\$ <del>0.1986</del>

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# b. Adjusting the IGFC Over Time

PG&E has no specific proposals beyond what is described in the Joint IOUs' Exhibit.

## c. CARE Discount Structure Changes

12	PG&E has no specific proposals beyond the one outlined in the
13	Joint IOU's Exhibit. However, because PG&E's existing CARE discount
14	is set at the statutory maximum of 35 percent, implementation of the AB
15	205 changes regarding NBC exemptions alone will result in the overall
16	discount being much higher than this nominal threshold. <sup>9</sup> In context of
17	PG&E's IGFC proposal, we are not proposing to alter this percentage,
18	but PG&E reserves the right to suggest changes to the CARE
19	discount percentage in response to other parties' proposals if they
20	suggest a different balance of IGFC discount levels.

**<sup>8</sup>** PG&E Motion for Adoption of Residential Rate Design Supplemental Settlement Agreement (Jan. 24, 2018), p. 11.

**<sup>9</sup>** As shown in Table II-9 in the "CARE Discount Structure Changes" section of Joint IOU Testimony, the average volumetric rate discount would be 37 percent, while the total average discount (including the fixed charge) would be 48 percent.

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### d. Implementation of the IGFC on Non-Default Rates

## 1) E-TOU-B and EV-A

PG&E does not propose to implement the IGFC on the Schedule E-TOU-B and EV-A rates, as these rates are currently closed to new customers and may be eliminated before the IGFC can be implemented on any rate. PG&E anticipates that Schedule E-TOU-B will be eliminated on October 31, 2025, with Schedule EV-A eliminated shortly thereafter on November 30, 2025. In the event that the IGFC is implemented before either of these dates, the overlap is likely to be only a few months at most. It would be imprudent to incur the costs required to implement the IGFC on these tariffs for such a short period, so PG&E proposes that these rates should retain current rate designs until they are phased out. At that time, enrolled customers will be moved onto a rate with an IGFC.

## 2) Schedule E-ELEC ("Electric Home" Rate)

As described in Joint IOUs' Exhibit, if instead of adopting 17 PG&E's IGFC proposal, the Commission instead opts for a 18 significantly lower fixed charge, then PG&E also proposes 19 contingent treatment of its Schedule E-ELEC.<sup>10</sup> Specifically, as 20 described in the Joint IOUs' Exhibit, Schedule E-ELEC's fixed 21 charge should always include at least \$15 of fixed distribution 22 charges for the moderate-income non-CARE population segment, 23 plus any other components in the default IGFC. 24

25 Table 1-5 below presents a hypothetical example of how this contingent proposal could come into effect if the default IGFC 26 27 collected only \$7 in distribution costs from the moderate-income 28 non-CARE group, with a +/-\$5 differential for low- and high-income customers. PG&E's Schedule E-ELEC would always retain the 29 30 standard IGFC differentiation (+/-\$5), with any amount greater than 31 the standard fixed charge discounted at the applicable nominal CARE discount. 32

**<sup>10</sup>** E-ELEC is referred to as the "Electric Home" rate in customer facing materials.

# TABLE 1-5 ILLUSTRATIVE E-ELEC IGFC IMPACTS

	Line No.	I	Income Group	Default IGFC, Distribution Component	Hypothetical E-ELEC Distribution Component						
	1 2 3	CARE Moderate Non-CARE High Income Non-CARE		\$2 (Base-\$5) \$7 (Base) \$12 (Base+\$5)	\$7.20 (Base-\$5+(\$8*65%)) \$15 (Base+\$8) \$20 (Base+\$5+\$8)						
1			In respon	se to other parties' p	roposals, PG&E may suggest						
2		different treatment of E-ELEC, especially if other proposals									
3		significantly deviate from PG&E's proposed structure to have									
4			income categories indexed to existing definitions of CARE and								
5		FERA. However, the general principle that the E-ELEC should not									
6			collect less distribution revenue through the fixed charge than it								
7		does today will still be applied.									
8		e.	Calibration Mech	nanism for Structure	e Revisit						
9			PG&E has no specific proposals beyond what is described in the								
10			Joint IOU's Exhibit on this topic.								
11		f.	Size Differentiati	ion							
12			PG&E has no	specific proposals b	eyond what is described in the						
13			Joint IOU's Exhib	it on this topic.							
14		g.	FERA Interaction	n with IGFC							
15			PG&E has no	specific proposals b	eyond what is described in the						
16			Joint IOU's Exhib	it on this topic.							
17		h.	Elimination of M	inimum Bills							
18			PG&E has no	specific proposals b	eyond what is described in the						
19			Joint IOU's Exhib	it on this topic.							
20		i.	Other Utility-Spe	cific Issues							
21			PG&E does n	ot currently know of	any further utility-specific rate						
22		design issues in addition to those outlined above, but reserves the right									
23		to address anything that may arise after review of the other parties'									
24		April 7, 2023, Opening Testimony.									

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## 6. Discussion of Public Tool Results and IOU-Specific Bill Impact Studies

As required by the March 23 Ruling, the required "Printable Pages" tab is included in an attachment to the Joint Exhibit. In addition to the required materials, that appendix also includes a supplemental version of these outputs that include model changes to reflect the Utility Proposal for FERA fixed charges, which cannot be calculated in the default version of this tool.

In addition, we highlight some key model outputs in this section. First, 7 8 Table 1-6 presents the average monthly bill impacts for each separate customer group--this is an aggregation of the "Heat Map Results" of the 9 Public Tool. Overall, this shows that the PG&E proposal provides significant 10 11 bill savings to customers in Income Brackets 1 through 3, with only the lowest usage Baseline Territory (T) seeing a bill increase, on average, for 12 customers in Bracket 2. However, Bracket 4 customers, on average, see bill 13 increases in all Baseline Territories. This is a necessary consequence of 14 the progressive IGFC structure required by AB 205. Reducing the 15 magnitude of bill impacts for high-income customers would require either 16 reducing the overall level of the IGFC and/or reducing the degree of 17 progressivity embedded in the IGFC. The former would reduce the benefit 18 19 of the rate design for promoting electrification and generally bringing volumetric rates closer to marginal cost, while the latter would begin to fail 20 21 the statutory intent to provide bill savings for low-income customers.

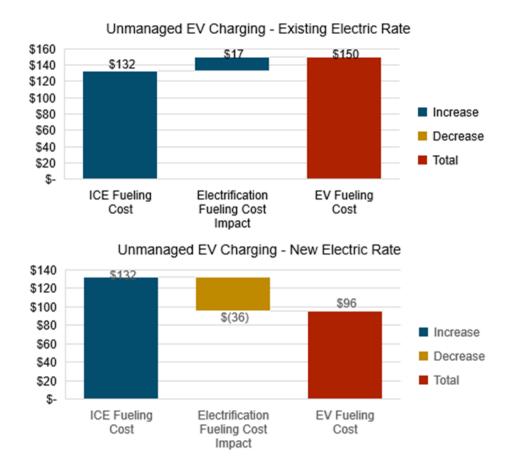
#### TABLE 1-6 AVERAGE MONTHLY BILL IMPACTS

Line No.	Baseline Territory	Bracket 1: <100% FPL CARE	Bracket 2: Other CARE	Bracket 1+2: All CARE	Bracket 3: Moderate Income	Bracket 4: High Income	Bracket 3+4: All Non-CARE
1	All PG&E	\$(25)	\$(10)	\$(17)	\$(9)	\$38	\$7
2	Р	\$(42)	\$(27)	\$(36)	\$(29)	\$18	\$(20)
3	Q	\$(34)	\$(18)	\$(27)	\$(24)	\$19	\$(8)
4	R	\$(35)	\$(19)	\$(26)	\$(26)	\$24	\$(17)
5	S	\$(31)	\$(15)	\$(22)	\$(21)	\$28	\$(8)
6	Т	\$(11)	\$4	\$(4)	\$9	\$50	\$24
7	V	\$(19)	\$(4)	\$(14)	\$(13)	\$28	\$(8)
8	W	\$(34)	\$(17)	\$(24)	\$(20)	\$33	\$(9)
9	Х	\$(19)	\$(4)	\$(11)	\$(7)	\$36	\$11
10	Y	\$(36)	\$(21)	\$(30)	\$(9)	\$32	\$(2)
11	Z	\$(24)	\$(9)	\$(21)	\$16	\$57	\$26

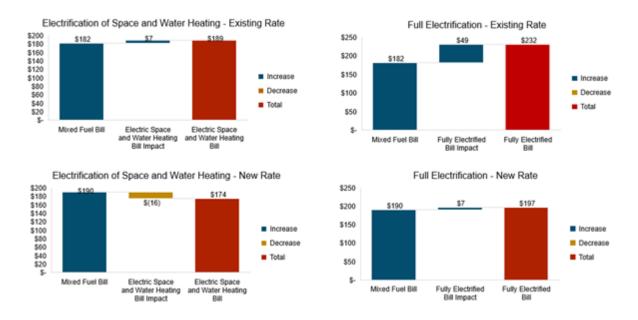
Note: This table relies on the default version of the Public Tool; because the default version of this tool cannot model the utility proposal for FERA customers, they are not included in this table.

1 Second, the Public Tool provides various metrics on the impact of the 2 proposed rate design on building and transportation electrification. PG&E intends to include in our Reply Testimony a more detailed assessment of 3 how its proposal compares to other parties' proposals in incentivizing 4 5 electrification. However, the tool indicates that PG&E's proposal does significantly improve the economics of electrification relative to the status 6 quo. For example, non-CARE customers on E-TOU-C go from paying more 7 8 to fuel an EV compared to an Internal Combustion Engine (ICE) vehicle to having substantial savings, as seen in Figure 1-1. Likewise, the relative 9 economics of building electrification are improved. As seen in Figure 1-2, 10 11 coastal Non-CARE customers, who see the highest increased bills from 12 building electrification under current rates, save on their bills when just electrifying space and water heating, and mostly negate the bill impacts of 13 full building electrification. 14

FIGURE 1-1 IMPACT OF THE IGFC ON EV CHARGING COSTS ON E-TOU-C



#### FIGURE 1-2 IMPACT OF THE IGFC ON BUILDING ELECTRIFICATION COSTS ON NON-CARE E-TOU-C COASTAL CUSTOMERS



Taken holistically, on current default rates full electrification 1 2 (replacement of all natural gas appliances and replacement of an ICE vehicle with an EV) would increase total household spending on energy. 3 Under the proposed IGFC structure this Bracket 3 coastal customers would 4 have reduced household energy spending relative to the status quo. This is 5 shown in Figure 1-3, which summarizes the electrification analysis of the 6 7 Public Tool. Figure 1-4 shows the same analysis for Bracket 2 Inland CARE customers. The full electrification on the IGFC would reduce this modeled 8 segment's annual household energy spending by \$1,535 1,536 compared to 9 the status quo. At the maximum eligible income for CARE for a typical 10 household of three people (\$46,060), this would be a ~33 percent energy 11 burden reduction from about 10 percent to 6.7 percent. 12

While all proposals in this proceeding will likely result in at least some improvement in electrification incentives relative to the status quo, proposals that include lower fixed charge levels would, in most cases, result in worse electrification incentives than PG&E's proposal.

#### FIGURE 1-3 IMPACT OF THE IGFC ON ANNUAL ENERGY SPENDING WITH FULL BUILDING AND TRANSPORTATION ELECTRIFICATION, BRACKET 3 COASTAL CUSTOMER, E-TOU-C

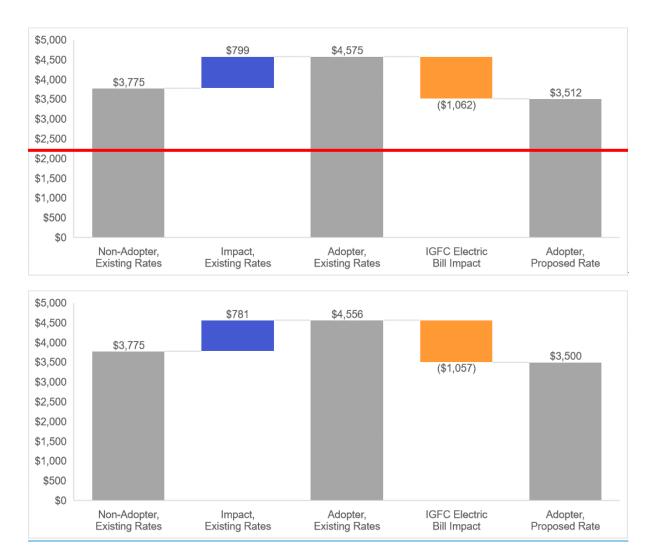


FIGURE 1-4 IMPACT OF THE IGFC ON ANNUAL ENERGY SPENDING WITH FULL BUILDING AND TRANSPORTATION ELECTRIFICATION, BRACKET 2 INLAND CUSTOMER, CARE E-TOU-C

