

Rulemaking: 22-07-005
(U 39 E)
Exhibit No.: (PG&E-01)
Date: April 7, 2023
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PACIFIC GAS AND ELECTRIC COMPANY
ELECTRIC RATES DEMAND FLEXIBILITY
ORDER INSTITUTING RULEMAKING
SUPPLEMENTAL TESTIMONY
PG&E-SPECIFIC IMPLEMENTATION OF INCOME GRADUATED FIXED
CHARGE



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 GRADUATED FIXED CHARGE

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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 **A. PG&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.¹ 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.

1 does not vary with changes in the volume of electricity a customer
2 consumes. This is aligned with its longstanding exclusion from being
3 considered an “avoidable cost” with changes in customer demand in the
4 CPUC’s Avoided Cost Calculator (ACC).² While, in theory, a demand
5 charge could be the most cost-based way to recover such costs, a fixed
6 charge is the next best choice and more appropriate for residential
7 customers 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.

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

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

2 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: <<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).

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

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

8 **3. Overall IGFC Level**

9 As calculated using the fixed charge spreadsheet tool developed by
 10 Energy and Environmental Economics (E3) (“Public Tool”), the
 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
 13 different levels of fixed charges, with low-income customers paying less than
 14 PG&E’s above-stated average (referred to below as a “discounted” fixed
 15 charge), and with high income customers paying more than PG&E’s
 16 average. No customer pays precisely the average fixed charge level,
 17 though the moderate-income bracket pays only slightly less than the
 18 average. Customers receiving fixed charge prices below the default level
 19 (Income Bracket 4 fixed charge) are considered to have a partially or more
 20 fully discounted fixed charge to result in the four-bracket income graduated
 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
 23 fixed charge level, along with what percentage of customers are expected to
 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
3 low-income ratepayer in each baseline territory would realize a lower
4 average monthly bill without making any changes in usage.” The Joint
5 Utilities’ Exhibit interprets this to mean that the average low-income
6 customer in each baseline territory must realize at least some bill savings as
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
9 amount of bill savings realized by low-income customers in the lowest
10 baseline usage territory (where average household usage is the lowest).
11 PG&E’s lowest usage climate zone is Baseline Territory T (covering the
12 coastal zone and including major cities such as San Francisco and
13 Oakland). The average usage of California Alternate Rates for Energy
14 (CARE) customers in Baseline Territory T is approximately 340 kilowatt-hour
15 (kWh) per month, as shown in the Public Tool. At the \$53 average fixed
16 charge level, CARE volumetric rate reduction is about \$0.08/kWh, implying
17 an average volumetric bill reduction of approximately \$27/month.⁴ This
18 means that the average low-income customer’s fixed charge must be no
19 more than that level. With this in mind, PG&E proposes that the average
20 fixed charge for low-income customers as a group be set below this
21 threshold. We further divide this group in order to provide lower fixed
22 charges to customers with incomes less than 100 percent of Federal
23 Poverty Level (FPL), resulting in customers below that threshold paying \$15
24 per month, and customers above that threshold paying \$30 per month. The
25 Public Tool’s estimates of bill impacts demonstrate that this has the
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
28 required by statute. However, Income Bracket 2 customers do see a
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

4 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.

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

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

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

3 **5. Impact of the IGFC on Rates and Other Rate Design Issues**

4 **a. Impact of the IGFC on Volumetric Rates**

5 **1) Most Rates should have an Equal Cents Reduction**

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

13 Schedules E-TOU-C and E-1 currently have two tiers such that
 14 the rates for usage above the Baseline Quantity (i.e., Tier 2 rates)
 15 are approximately 25 percent higher than Tier 1 rates.⁵ This is
 16 implemented in the underlying tariffs as the “Conservation Incentive
 17 Adjustment.” PG&E is not proposing here to change the 1.25:1 tier

5 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.

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

11 **2) EV2 Distribution Rates Should be Adjusted on an Equal percent**
12 **Basis**

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

6 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).⁷ 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 1-3
 IGFC 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

⁷ 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.”⁸ 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	\$0.2005
4	Winter Peak	\$0.4271	\$0.4260	\$0.3431
5	Winter Part Peak	\$0.4104	\$0.4093	\$0.3275
6	Winter Off Peak	\$0.2417	\$0.2406	\$0.1986

8 **b. Adjusting the IGFC Over Time**

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

11 **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.⁹ 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.

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

⁹ 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.

1 **d. Implementation of the IGFC on Non-Default Rates**

2 **1) E-TOU-B and EV-A**

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

16 **2) Schedule E-ELEC (“Electric Home” Rate)**

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

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

¹⁰ E-ELEC is referred to as the “Electric Home” rate in customer facing materials.

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

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

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

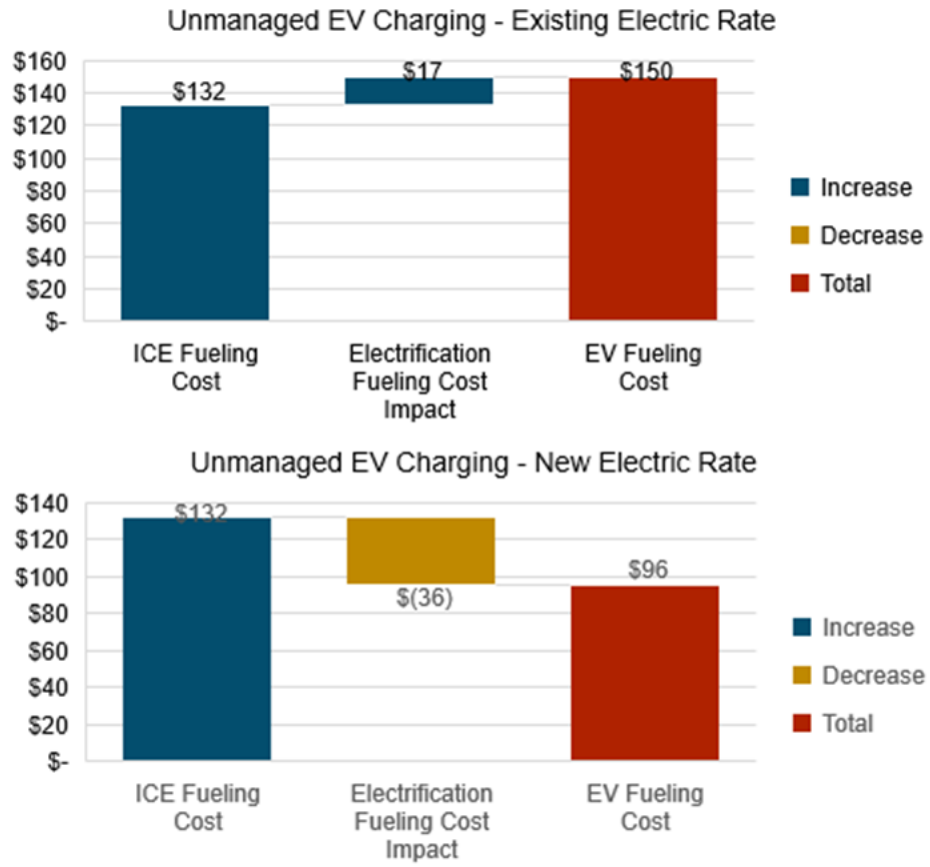
**TABLE 1-6
AVERAGE MONTHLY BILL IMPACTS**

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	P	\$(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	T	\$(11)	\$4	\$(4)	\$9	\$50	\$24
7	V	\$(19)	\$(4)	\$(14)	\$(13)	\$28	\$(8)
8	W	\$(34)	\$(17)	\$(24)	\$(20)	\$33	\$(9)
9	X	\$(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
3 intends to include in our Reply Testimony a more detailed assessment of
4 how its proposal compares to other parties' proposals in incentivizing
5 electrification. However, the tool indicates that PG&E's proposal does
6 significantly improve the economics of electrification relative to the status
7 quo. For example, non-CARE customers on E-TOU-C go from paying more
8 to fuel an EV compared to an Internal Combustion Engine (ICE) vehicle to
9 having substantial savings, as seen in Figure 1-1. Likewise, the relative
10 economics of building electrification are improved. As seen in Figure 1-2,
11 coastal Non-CARE customers, who see the highest increased bills from
12 building electrification under current rates, save on their bills when just
13 electrifying space and water heating, and mostly negate the bill impacts of
14 full building electrification.

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



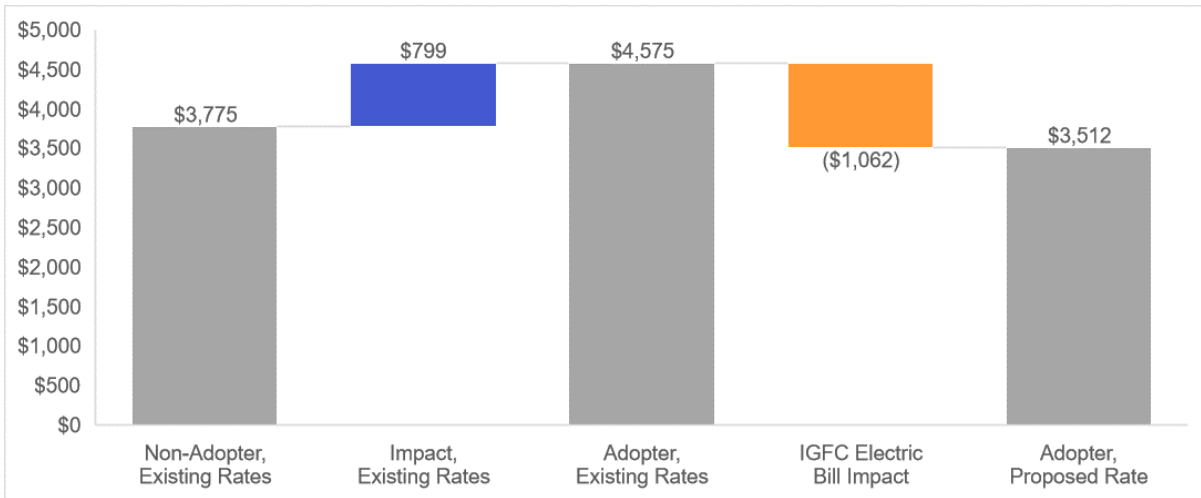
**FIGURE 1-2
IMPACT OF THE IGFC ON BUILDING ELECTRIFICATION COSTS ON NON-CARE E-TOU-C
COASTAL CUSTOMERS**



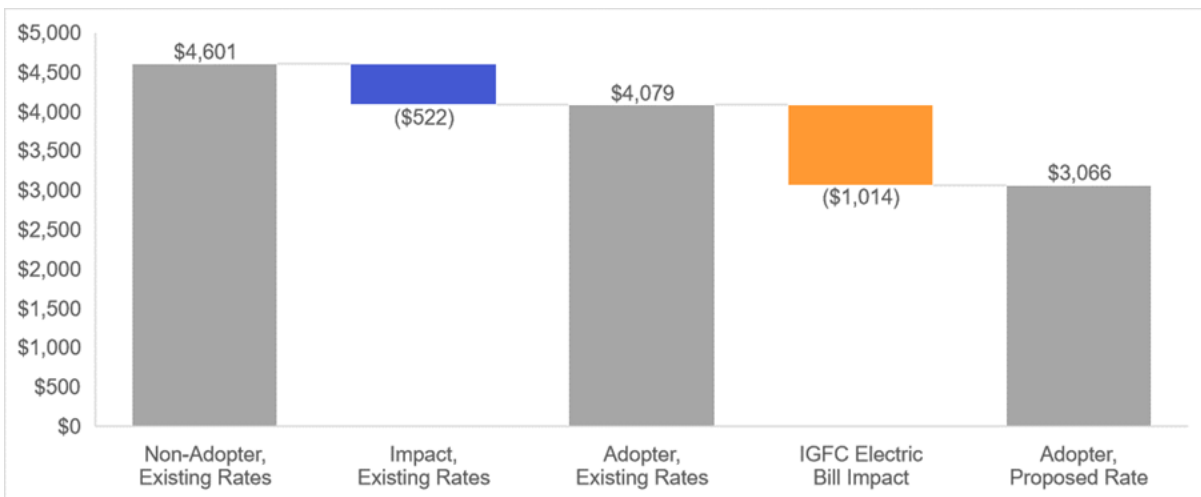
1 Taken holistically, on current default rates full electrification
2 (replacement of all natural gas appliances and replacement of an ICE
3 vehicle with an EV) would increase total household spending on energy.
4 Under the proposed IGFC structure this Bracket 3 coastal customers would
5 have reduced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

13 While all proposals in this proceeding will likely result in at least some
14 improvement in electrification incentives relative to the status quo, proposals
15 that include lower fixed charge levels would, in most cases, result in worse
16 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**



PACIFIC GAS AND ELECTRIC COMPANY
CHAPTER 2
PG&E INCOME GRADUATED FIXED CHARGE
IMPLEMENTATION

PACIFIC GAS AND ELECTRIC COMPANY
CHAPTER 2
PG&E INCOME GRADUATED FIXED CHARGE IMPLEMENTATION

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1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **CHAPTER 2**
3 **PG&E INCOME GRADUATED FIXED CHARGE IMPLEMENTATION**

4 **A. Introduction**

5 This chapter is part of the Supplemental Pacific Gas and Electric Company
6 (PG&E)-Specific Opening Testimony, Exhibit PG&E-01 (PG&E’s Supplemental
7 Testimony) and provides the PG&E-specific showing that supplements the
8 implementation framework presented in the Joint Investor-Owned Utilities (IOU)
9 Opening Testimony for the Income Graduated Fixed Charge (IGFC) Exhibit Joint
10 IOUs-01 (Joint IOUs’ Testimony). In Chapter 4 of the Joint IOUs’ Testimony, the
11 Joint IOUs describe their proposed approach for implementing rates that include
12 a separate line item showing each residential customer’s IGFC, with the
13 necessary adjustment to the volumetric rate component, for all of PG&E’s
14 residential rate schedules. In this Chapter 2 of PG&E’s Supplemental
15 Testimony, Section B provides further detail on cost estimates for PG&E’s
16 portion of the activities to accomplish the proposed framework presented in the
17 Joint IOU Testimony. Section C of this chapter describes circumstances that
18 may affect the PG&E-specific timing for implementation of the IGFC rates.

19 **B. PG&E’s Implementation Cost Estimates**

20 The Joint IOUs’ Testimony, Chapter 4 (Implementation), summarizes the
21 estimated costs associated with implementing the Joint IOUs’ proposed IGFC
22 rate structure. The key work areas that will need to be resourced are the
23 following:

- 24 1. Programming and testing necessary structural changes within the Joint
25 IOU’s billing systems for each affected rate;
- 26 2. Updating online customer-facing tools to reflect IGFC rates;
- 27 3. Contact center handling of increased customer calls expected before, during
28 and after the “Go Live” date for IGFC presentation in customers’ bills; and
- 29 4. Program and product management.

30 In this section, PG&E describes the PG&E-specific cost estimates
31 associated with these implementation activities.

1 **1. Costs Not Included**

2 Income assignment/verification and marketing, education and outreach
3 (ME&O) costs are not included in this chapter. The costs associated with
4 assigning each residential customer account to the appropriate household
5 income bracket and verifying household income are covered separately, in
6 Chapter 3 (Income Verification) of the Joint IOU’s IGFC Testimony. ME&O
7 efforts to enable IGFC implementation are described in Chapter 5
8 (Marketing, Education & Outreach) of the Joint IOU’s IGFC Testimony.
9 PG&E-specific marketing costs for IGFC implementation are set forth in
10 Chapter III of PG&E’s Supplemental Testimony.

11 For the convenience of the reader, Appendix A to this exhibit presents
12 all the estimated PG&E-specific costs related to the Joint IOU’s proposal
13 including Income Verification, Implementation, and Marketing, Education &
14 Outreach.

15 Please note that the potentially considerable costs of performing billing
16 corrections for customers who are misassigned to the incorrect income
17 bracket are not included in the PG&E cost estimates presented here. As is
18 described in the Joint IOUs’ Testimony in Chapter 3 (Income Verification)
19 the Joint IOUs request that assignment to the inappropriate income bracket
20 not be considered a billing error due to the challenges in identifying a
21 customer’s household income and the substantial costs that would be
22 required to correct bills for misassigned customers.

23 **2. PG&E-Specific Implementation Costs**

24 Table 2-1 below summarizes PG&E’s utility-specific estimated
25 Implementation costs by each functional work area.¹ The total IGFC
26 Implementation costs—for the period beginning in the year leading up to the
27 rollout of IGFC rates, the Go Live year of billing implementation, and the
28 following two years after the Go Live—are approximately \$24 million over
29 four years. Due to the uncertainty in the timing of establishing an income
30 assignment and verification process, costs are shown relative to the Go Live
31 year in which customers begin to receive bills with IGFC rates. The Go Live

1 The estimated costs presented in this chapter focus on Implementation costs, which as previously stated do not include Marketing and Income Verification costs.

1 year is denoted as “*t*”, the year prior, as *t-1*, the year after implementation is
 2 *t+1*, and two years after implementation is *t+2*. PG&E’s cost estimation
 3 approach across key work areas is further described in the remainder of
 4 Section B of this chapter.

5 Please note that these cost estimates are preliminary and may need to
 6 be updated based on learnings developed during this proceeding and in
 7 response to directives of a Final Decision in this proceeding. As is
 8 requested in the Joint IOUs’ Testimony, PG&E requests that the
 9 Commission Final Decision authorize a follow-on process for the IOUs to
 10 refine implementation timing and costs and submit those costs for approval
 11 through the Advice Letter process. Please also note that, because
 12 Assembly Bill (AB) 205 was signed into law June 30, 2022, IGFC
 13 implementation costs are incremental to PG&E’s resourcing request filed in
 14 its last General Rate Case—which was submitted before passage of
 15 AB 205—and did not include any costs for newly added IGFC rates.

TABLE 2-1
PG&E’S SUMMARY OF ESTIMATED INCREMENTAL COSTS OF IGFC IMPLEMENTATION

Line No.	Functional Work Area	Year Relative to Go Live Year in Billing System (t)				
		t-1	t	t+1	t+2	t-1 through t+2
1	Billing IT Implementation	\$4,200,000	\$800,000	–	–	\$5,000,000
2	Updates to Online Customer Rate Tools	–	1,010,000	–	–	1,010,000
3	Customer Support through Contact Center	5,980,000	5,020,000	\$3,250,000	1,660,000	15,910,000
4	Program and Product Management	950,000	820,000	410,000	220,000	2,400,000
5	Total	\$11,130,000	\$7,650,000	\$3,660,000	\$1,880,000	\$24,320,000

Note: As discussed in Section C below, these figures assume that PG&E only builds the IGFC billing functionality once, into its new C2M mass market billing system, and is not required to also build it into its legacy billing systems.

16 3. Billing Implementation Costs

17 PG&E’s estimated billing system implementation costs under the
 18 proposal in the Joint IOUs’ testimony were developed by PG&E’s Billing
 19 Information Technology (IT) team, based on their extensive experience with
 20 enabling new structural changes to rates in PG&E’s billing systems.

1 Implementing updates to all affected residential rates with the IGFC changes
2 will necessitate resources and incur costs to:

- 3 • Create data interfaces between PG&E's billing systems and the
4 Third-Party administrator to perform the necessary assignment of every
5 residential customer into an IGFC household income bracket, as
6 described in the Joint IOUs' Testimony, Chapter 3 (Income Verification);
- 7 • Establish an enrollment process, leveraging the Third Party's data, for
8 assignment of new customers onto their appropriate IGFC Income
9 Bracket;
- 10 • Build (i.e., code) new fixed charge data structures for all residential
11 rates;
- 12 • Build functionality between the new IGFC rate structures and bill
13 modifiers such as Net Energy Metering (NEM), Net Billing, Critical Peak
14 Pricing and other modifiers;
- 15 • Revise data interfaces with downstream data systems that depend on
16 billing data, such as those that support online rate analysis tools for
17 customers;
- 18 • Adjust billing presentment (i.e., the interface between billing data and
19 the bills that are sent to customers); and
- 20 • Test the functionality and accuracy of all IGFC-related billing system
21 modifications, including those listed above.

22 The total cost for modifications to PG&E's billing system is estimated at
23 \$5.0 million, as shown in Table 2-1.

24 **4. Costs to Update Online Customer-Facing Tools**

25 PG&E provides customers with energy and bill management tools that
26 show customers their potential billing costs on the PG&E rates for which a
27 customer may be eligible. The rate modeling engines that support these
28 tools are separate from PG&E's billing systems as they must be capable of
29 ingesting customer usage data and providing potential bills on multiple rates,
30 whereas PG&E's billing system is designed to provide calculations only on
31 the customer's current rate. A key bill management tool that will need to be
32 updated is PG&E's web-based customer-specific rate comparison tool,
33 available through PG&E's online "Your Account" service at pge.com. This
34 tool shows customers an estimate of their bills under residential electric

1 rates on which they may be considering enrolling. PG&E’s online
2 customer-facing Distributed Energy Resource (DER) tools will also need to
3 be updated to reflect the adopted new IGFC rates. These tools enable
4 customers to assess the costs and benefits of adding solar, storage, or
5 electric vehicles. The total cost for updating these online customers tools is
6 approximately \$1.0 million as shown in Table 2-1.

7 **5. Contact Center Costs**

8 PG&E operates two contact centers that handle an average of
9 6.4 million customer inquiries a year.² PG&E anticipates that the
10 introduction of rates with IGFCs will add significant incremental calls to
11 PG&E’s contact center. The PG&E-specific cost estimates presented here
12 assume that informing customers about the upcoming IGFC change to their
13 bills through other communication channels—as proposed in Chapter 5
14 (Marketing, Education & Outreach) of the Joint IOUs Testimony—should
15 limit contact center impacts. Additionally, PG&E will leverage our Interactive
16 Voice Recognition (IVR) software to enable customers who call into the
17 contact centers to self-serve on IGFC questions as much as possible.
18 However, with a bill change of this nature, we anticipate that many
19 customers will still want to speak with a Customer Service Representative
20 (CSR). Thus, PG&E will need to prepare to serve customers through the
21 customer contact center channel as well.

22 PG&E has estimated training costs to onboard and prepare CSRs for
23 answering questions about the new IGFC rates, as well as to modify our IVR
24 system to enable customers to self-serve as much as possible. These costs
25 are included in the Contact Center cost estimates presented in Table 2-1.

26 PG&E used the following approach to estimate the number of
27 IGFC-related calls to which a PG&E CSR may need to respond: First,
28 PG&E identified segments of PG&E’s residential customers who are likely to
29 call about the IGFC. We then estimated the number of customers in each of
30 those segments and predicted what percentage of the customers in a given
31 segment would be likely to call. In this section, PG&E describes the three
32 residential customer segments PG&E expects are likely to contact the

2 Average annual calls handled from 2019-2022.

1 contact center and the percent of customers in each segment that PG&E
2 believes are likely to call. The percent of customers in each segment that is
3 likely to call was estimated based on judgement by experienced PG&E
4 Contact Center Operations staff. The percentages account for any overlap
5 between the segments to avoid double counting. Calls were estimated for
6 the year prior to billing implementation of the IGFC rates, the Go Live year in
7 PG&E's billing systems and presentment on customer bills, and the two
8 years following billing implementation. The Go Live year is denoted as "*t*",
9 the year prior, as *t-1*, the year after implementation is *t+1*, and two years
10 after implementation is *t+2*.

11 PG&E's current average cost per customer call was then multiplied by
12 the estimated number of incremental IGFC calls to get the estimated cost of
13 managing the increase in call volumes due to IGFC implementation. PG&E
14 estimated calls and costs expected to be incurred in the pre-IGFC launch
15 period, during the launch, and after the transition to the new IGFC rates.
16 PG&E's current costs to manage calls were increased by an assumed
17 inflation rate of two percent per year, which may need to be revised in the
18 advice letter to update costs after a Final Decision is issued.

19 The first group of customers PG&E believes are likely to call are
20 "corrected misassigned customers" or customers who recognize that they
21 have been incorrectly assigned to a given income bracket and successfully
22 appeal their assignment. As is described in Chapter 5 (Marketing,
23 Education & Outreach) of the Joint IOUs' Testimony, PG&E plans to conduct
24 extensive ME&O to raise customer awareness about the income assignment
25 appeal process described in Chapter 3 (Income Verification) of the Joint
26 IOUs' Testimony. Despite these efforts, PG&E anticipates that some
27 customers will seek assistance through PG&E's contact center to clarify how
28 to get their income assignment changed. As is described in Chapter 3
29 (Income Verification) of the Joint IOUs' Testimony, PG&E anticipates that
30 approximately 20 percent of customers may be misassigned due to an
31 absence of tax return information and limitations to predictive modeling. Of
32 those customers, PG&E anticipates that approximately 10 percent will call.

33 The second group of customers likely to call are NEM customers. NEM
34 customers are accustomed to paying only their minimum bill monthly until

1 their annual True-Up, at which time charges and NEM credits are
2 reconciled. NEM customers may be surprised that their monthly bill amount
3 is higher than their minimum bill had been. PG&E expects that
4 approximately 15 percent of NEM customers will call.

5 The third group of customers PG&E believes will call are customers with
6 general questions about the rate change. Some PG&E customers are not
7 able to utilize online channels to get information and/or may have additional
8 questions beyond what is provided through self-service options (i.e., online,
9 IVR). PG&E estimates that approximately two percent of PG&E's general
10 residential customer population will call.

11 The total cost for managing IGFC-related calls to PG&E's contact center
12 is approximately \$15.9 million as shown in Table 2-1.

13 **6. Program and Product Management Support**

14 PG&E will require staff to manage IGFC implementation as a program,
15 across which many different products will be affected. Key workstreams
16 related to program management include budget management and
17 coordinating change management across the multiple PG&E functional
18 areas that will be affected by the change to IGFC rates. Additional product
19 management staff will be needed to develop business requirements for
20 implementation in billing platforms and online rate and DER tools as well as
21 for supporting testing and quality assurance. The total cost of program and
22 product management related to IGFC rate implementation is approximately
23 \$2.4 million as shown in Table 2-1.

24 **C. PG&E's Implementation Timing**

25 To facilitate the IGFC policy objectives of encouraging electrification and
26 enabling greater rate affordability for lower income customers, PG&E is seeking
27 to implement the IGFC rates as soon as is practicable. PG&E must navigate,
28 however, our billing system modernization effort in which PG&E will be replacing
29 our current mass market billing system with a more flexible and efficient system.
30 This constraint is specific to PG&E, as San Diego Gas & Electric Company and
31 Southern California Edison Company have recently completed each of their
32 billing system modernization projects.

1 Currently, PG&E has two primary billing systems: (1) our mass market
2 system called Customer Care and Billing (CC&B) that serves most residential
3 customers and (2) our Advanced Billing System (ABS) that serves customers on
4 more complex rate structures, such as non-residential customers on rates with
5 demand charges and some residential customers who utilize more complex rate
6 structures such as NEM Paired Storage. PG&E is in the process of replacing
7 both our CC&B mass market billing system and our ABS complex billing system
8 with a unified Customer to Market (C2M) billing system, which is currently
9 expected to be ready for programming to begin in Q1 2027. If the timelines for
10 setting up the income verification system described in the Joint IOUs' Testimony
11 Chapter 3 (Income Verification) can be met and based on the estimated
12 timelines for billing implementation and ME&O activities outlined in Chapter 5
13 (Implementation) of the Joint IOUs' Testimony, PG&E expects to be able to
14 make the IGFC rates available for customer billing in the new C2M systems in
15 2028.

16 PG&E cautions, however, that other unknown challenges may emerge that
17 could further impact the timeline and cost. Furthermore, should the CPUC
18 decide to implement an interim solution before 2027, PG&E's costs would
19 increase, and timing could be affected by the need to build the IGFC rates in
20 both PG&E's legacy and new billing systems.

PACIFIC GAS AND ELECTRIC COMPANY
CHAPTER 3
PG&E INCOME GRADUATED FIXED CHARGE MARKETING,
EDUCATION, AND OUTREACH

PACIFIC GAS AND ELECTRIC COMPANY
CHAPTER 3
PG&E INCOME GRADUATED FIXED CHARGE MARKETING, EDUCATION, AND
OUTREACH

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1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **CHAPTER 3**
3 **PG&E INCOME GRADUATED FIXED CHARGE MARKETING,**
4 **EDUCATION, AND OUTREACH**

5 **A. Introduction**

6 This chapter is part of the Supplemental Pacific Gas and Electric Company
7 (PG&E) Specific Testimony, Exhibit PG&E-01 (PG&E's Supplemental Opening
8 Testimony) and presents supplemental detail on PG&E's utility-specific cost
9 estimates for implementing the overall marketing plan proposed in the Joint
10 investor-owned utilities' (IOU) Opening Testimony for the Income Graduated Fixed
11 Charge (IGFC) Exhibit Joint IOUs-01 (Joint IOUs' Testimony) Chapter 5 on
12 Marketing, Education and Outreach (ME&O).

13 That overarching ME&O proposal includes details on the objectives, research
14 insights, strategies, messaging phases, campaign tactics, community outreach, and
15 metrics and tracking to be implemented by each of the large IOUs. Under that
16 overall proposed ME&O plan, PG&E currently estimates and requests authorization
17 from the California Public Utilities Commission (CPUC) to recover \$11.44 million in
18 expenses, over a six-year period (as shown in Table 3-1, below) to cover currently
19 expected ME&O costs necessary to appropriately support customer awareness,
20 understanding, and acceptance of the IGFC as proposed assuming approval of the
21 IOUs' testimony without modification. However, PG&E reserves the right to update
22 this estimate depending on what we learn as this proceeding progresses, as
23 refinements may need to be made. In addition, the pre-Decision estimates of the
24 IGFC Marketing costs are likely to need to be refined after the final decision is
25 issued based on the specific elements of the overall project the CPUC adopts (see
26 Section M below).

27 In developing PG&E's estimated IGFC ME&O budget, we have leveraged,
28 where applicable, the marketing costs for the Residential Time-of-Use (TOU)
29 Transition (from the Residential Rate Reform OIR, "RROIR" proceeding,
30 Rulemaking 12-06-012), as well as related experiences and lessons learned. We
31 believe this provides a fairly analogous recent effort for use as a model and starting
32 point for forecasting likely IGFC ME&O needs, as there are significant similarities in
33 the intricacies and customer-centric approach to ME&O that helped make the

1 Default TOU Transition successful. However, we note there was no income
 2 graduated element to the RROIR, and that because an IGFC has never been done
 3 before, there are likely to be differences. We have attempted to note adjustments to
 4 reflect our best understanding of the likely impacts of the differences for
 5 communicating IFGC (as compared with the recent default TOU rate change
 6 customer communications). Table 3-1 below presents PG&E's initial cost estimates.
 7 IGFC program costs are expected to be lower in time-period t-2, during the transition
 8 preparatory period, and then to increase during time-period t-1 to t due to significant
 9 communications through multiple channels just prior to and during the IGFC
 10 implementation (t). Expected IGFC ME&O costs are expected to ramp down during
 11 time-period t+1 to t+2 to a minimal amount in time-period t+2 to t+3 after the
 12 implementation is completed and only support communications are necessary.

**TABLE 3-1
 PG&E-SPECIFIC ESTIMATED IGFC BUDGET FOR JT. IOU PROPOSED ME&O**

Line No.	Channel	t-2 Budget	t-1 Budget	t Budget	t+1 Budget	t+2 Budget	t+3 Budget	Total
1	Messaging Research and Development	\$250,000	\$250,000	\$100,000	\$50,000	n/a	n/a	\$650,000
2	Email	n/a	25,000	320,000	25,000	n/a	n/a	370,000
3	Direct Mail	n/a	n/a	2,940,000	n/a	n/a	n/a	2,940,000
4	CBO Outreach	n/a	370,000	370,000	50,000	50,000	\$50,000	890,000
5	Web	n/a	25,000	50,000	25,000	10,000	5,000	115,000
6	Media Relations	50,000	50,000	100,000	50,000	10,000	n/a	260,000
7	Paid Media	n/a	1,000,000	1,000,000	1,000,000	50,000	50,000	3,100,000
8	Integrated Programs Outreach	n/a	50,000	50,000	50,000	10,000	10,000	170,000
9	Agency Support	n/a	200,000	800,000	200,000	50,000	50,000	1,300,000
10	PG&E Marketing Labor Support	120,000	750,000	475,000	120,000	120,000	60,000	1,645,000
11	Total	\$420,000	\$2,720,000	\$6,205,000	\$1,570,000	\$300,000	\$225,000	\$11,440,000

13 **B. Customers**

14 Implementing an IGFC is not a small undertaking. The PG&E service
 15 territory spans a significant portion of California (basically from Bakersfield North
 16 to the Oregon border, with small carve-outs). PG&E currently has approximately
 17 4.9 million residential electric customers who will need to be notified of the IGFC,

1 why it is being separated out of volumetric rates onto its own line-item, how the
2 division of these existing costs will impact them, and what steps they may need
3 to take.

4 **C. Messaging Research and Development**

5 The Joint IOU testimony identifies several areas of research currently being
6 considered. This research will help to refine IGFC messaging; PG&E customer
7 research will inform and validate communications to our residential electric
8 customers across various impacted customer segments. PG&E currently
9 estimates costs totaling \$650k over the above-referenced six-year period to
10 conduct and implement the results of this research. The plan is to complete this
11 work within the program's first three years.

12 **D. Email**

13 PG&E plans to use email as the primary method for directly reaching most
14 of our electric customers with communications to provide awareness of the IGFC
15 and notifications about when each customer's bill will transition to reflect both
16 the IGFC and their reduced volumetric charge. Utilizing the email channel is a
17 highly cost-effective way to reach electric customers as the \$370k budget for
18 email will reach 80 percent of the residential electric customers versus the
19 \$2.94M direct mail budget that is necessary to reach the remaining 20 percent of
20 electric customers who do not have an email address on file. Therefore, an
21 "email first" approach will be used for all except those customers without an
22 email on file with PG&E. Specifically, PG&E currently has valid email addresses
23 for approximately 80 percent of our 4.9 million residential electric customers,
24 thus we currently estimate that about 3.185 million customers will receive their
25 IGFC communications by email.

26 PG&E has estimated the email component of our utility-specific ME&O plan
27 will likely cost \$370k over the six-year period discussed above, covering: email
28 production, deployment, monitoring, and reporting of email results.

29 **E. Direct Mail**

30 PG&E plans to utilize direct mail as a secondary method to reach customers
31 who do not have an email address on file. Direct mail will provide awareness of
32 the IGFC and deliver notifications when transitions occur. PG&E has estimated
33 \$2.94 million over the six-year period, to cover: development, production,

1 printing, postage to send out the mailer, postage for the enclosed business reply
2 card to be sent back, and other costs associated with mailing these items. It is
3 estimated that 980k customers will receive direct mail because approximately
4 20 percent of PG&E's 4.9 million residential customers do not have valid email
5 addresses on file.

6 **F. Community-Based Organizations' Outreach (Community Outreach)**

7 PG&E builds and cultivates partnerships with Community-Based
8 Organizations (CBOs) who already have a deep understanding of the needs of
9 their clients. CBOs are often a critical entry point for outreach to some
10 customers (especially lower income and harder to reach customers). PG&E's
11 proposed ME&O budget will include support for developing outreach materials
12 for use by the CBOs, to increase awareness and understanding of the new IGFC
13 line item on customers' bills. PG&E estimates the CBO-related outreach budget
14 is \$890k over the above-referenced six-year period, with the majority of these
15 costs being incurred in the first two years of the program to support initial
16 awareness and understanding of the IGFC as it is launched. The remaining
17 budget, for years three through six, will be used for ongoing education and to
18 maintain a strong level of awareness. PG&E estimates \$890k over the six-year
19 period which includes a full-time community engagement employee who will
20 engage CBOs, plan, manage, report, and support the CBO efforts, as well as
21 create and produce outreach messages and materials to support various
22 audiences.

23 **G. Pge.com Web Pages**

24 Pge.com is an important outreach and education channel to which
25 customers can be driven for more in-depth information about the IGFC. Web
26 pages need to be created to provide both general and in-depth customer
27 information about the new IGFC, including a full description of the program, a
28 demonstration of the Income Brackets and each of their associated IGFC
29 charges, an illustration of how the IGFC reduces customers' volumetric charges,
30 as well as sample bills. The following proposed Website activities are estimated
31 to cost \$115k over the above-referenced six-year period: (1) incremental
32 internal labor, (2) development and design support, and (3) periodic updating
33 after initial roll-out.

1 **H. Media Relations**

2 PG&E will identify opportunities to utilize non-paid and earned media
3 through PG&E’s media relations team, publications in PG&E’s online blog
4 (Currents), and media outreach for news outlets to carry forward the messaging.
5 PG&E has allocated \$260k over the above-referenced six-year period for these
6 activities.

7 **I. Paid Media**

8 PG&E plans to utilize localized paid digital and print media to target
9 customers by income, age, and/or geography. The proposed paid media, along
10 with planned in-language media, will provide “air cover” to reinforce IGFC
11 messaging through other ME&O channels. PG&E has estimated \$3.1 million for
12 digital and print over the six-year period. Such costs include planning,
13 development and purchasing media in digital, print, and in-language outlets.
14 PG&E’s paid media cost estimates were developed based on the post-PG&E
15 TOU transition Rate Options targeted campaigns in 2022.

16 **J. Integrated Programs Outreach**

17 PG&E will identify opportunities for cross-program efficiencies by integrating
18 IGFC messaging into other ME&O efforts for complementary programs (Solar,
19 Income Qualified Programs, etc.), if and as appropriate (based on how well the
20 audience and actions overlap). PG&E is currently estimating \$170k for
21 integrated outreach for message development and for the IGFC’s portion of the
22 costs associated with design and execution of marketing materials.

23 **K. Agency Support**

24 PG&E will utilize creative agencies to work on the development of IGFC
25 communications materials to be used in direct mail, email, digital, print, Web,
26 in-language, and support materials, as needed. These costs account for the
27 creative agency to develop the messaging, design, visual and graphical
28 representation of designated outreach messages and materials, such as
29 versions of direct notifications, and all paid advertising creative. PG&E has
30 estimated \$1.3 million over the six-year period for creative development of
31 needed IGFC materials. This cost estimate is based on TOU transition costs
32 recorded for 2017-2019.

1 **L. PG&E Marketing Labor Support**

2 PG&E has estimated marketing labor support¹ for these new IGFC efforts
3 amounts to \$1.64 million in incremental costs over the six-year period. The
4 labor cost is inclusive of the internal marketing labor related to developing the
5 strategy, planning campaigns, execution of each tactic, continuous monitoring
6 and optimization, managing overall outreach plans and calendars, reporting, and
7 regulatory support. These cost estimates were developed based on the review
8 of the costs for 2017-2021 residential TOU transition for PG&E marketing team
9 support recovered in the RRRMA. Any labor costs for the agency support and
10 CBO outreach are included within those categories.

11 **M. Budget Adjustments**

12 PG&E has forecasted this budget based on the plan being proposed here,
13 which assumes implementation of the IGFC proposal in the Joint IOUs'
14 Testimony without amendment by the CPUC. As noted above, these budget
15 estimates may change depending on the details of the CPUC's final IGFC
16 decision and the complexity of the final rates, the accuracy of the chosen
17 income-verification assignment and appeal approach, the likely timing of IGFC
18 roll-out, and other program needs. In addition, even if the total cost remains the
19 same, the allocation of costs among the above-referenced ME&O categories
20 may need to be adjusted to capture the CPUC's final decision and refined due to
21 additional findings from future customer research or lessons learned.

22 Therefore, PG&E also proposes the CPUC adopt a follow-on Advice Letter
23 process for capturing final estimates based on the CPUC's final decision, which
24 may change one or more assumptions underlying these initial cost estimates
25 under the Joint IOUs' IGFC proposals presented in Exhibit Joint IOUs-01.

¹ Any labor associated with Community Engagement is included in the individual line-item budgets.

PACIFIC GAS AND ELECTRIC COMPANY
APPENDIX A
PG&E-SPECIFIC ESTIMATED BUDGET FOR THE
JOINT IOUS' PROPOSAL

APPENDIX A
PG&E-SPECIFIC ESTIMATED BUDGET FOR THE JOINT IOUS' PROPOSAL INCLUDING:
INCOME VERIFICATION, IMPLEMENTATION, AND MARKETING, EDUCATION & OUTREACH
(THOUSANDS OF DOLLARS)

Line No.	Activity	Years Relative to Go-Live Year in Billing System (t)						Total
		t-2	t-1	t	t+1	t+2	t+3	
1	Activity							
2	Income Verification	–	–	400	400	400	400	1,600
3	Implementation	–	–	–	–	–	–	–
4	Billing IT Implementation	–	4,200	800	–	–	–	5,000
5	Updates to Online Customer Rate Tools	–	–	1,010	–	–	–	1,010
6	Customer Support Through Contact Center	–	5,980	5,020	3,250	1,660	–	15,910
7	Program and Product Management	–	950	820	410	220	–	2,400
8	Total	–	11,130	7,650	3,660	1,880	–	24,320
9	Marketing, Education & Outreach	420	2,720	6,205	1,570	300	225	11,440
10	Grand Total	420	13,850	13,855	5,230	2,180	225	37,360

PACIFIC GAS AND ELECTRIC COMPANY
APPENDIX B
STATEMENTS OF QUALIFICATIONS

1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **STATEMENT OF QUALIFICATIONS OF COLIN KERRIGAN**

3 Q 1 Please state your name and business address.

4 A 1 My name is Colin Kerrigan, and my business address is Pacific Gas and
5 Electric Company (PG&E), 300 Lakeside Drive, Oakland, California.

6 Q 2 Briefly describe your responsibilities at PG&E.

7 A 2 My current position at PG&E is Rate Analyst, Principal on the Rate
8 Architecture and Load Forecasting team. I am responsible for preparing and
9 managing the preparation of retail electric rate design proposals for
10 presentation before the California Public Utilities Commission.

11 Q 3 Please summarize your educational and professional background.

12 A 3 I received a Bachelor of Science in Environmental Economics and Policy
13 from the University of California, Berkeley in 2011. I joined PG&E in 2011
14 as an analyst in PG&E's Customer Energy Solutions department and took
15 on roles of increasing responsibility in this department through 2016. My
16 primary responsibilities included providing analytical support for the various
17 customer programs managed by PG&E, such as Energy Efficiency, Demand
18 Response, Pricing Products, and Distributed Generation. I transitioned to
19 the Energy Procurement and Policy Department in 2017. In this role I
20 developed PG&E positions and strategy regarding the nexus of supply side
21 planning and distributed energy resources. I transitioned to my current role
22 at the start of 2021.

23 Q 4 What is the purpose of your testimony?

24 A 4 I am sponsoring the following testimony in PG&E's Income Graduated Fixed
25 Charge Testimony in Track A of the Electric Demand Flexibility OIR:

- 26 • Exhibit PG&E-01:
 - 27 – Chapter 1, "PG&E Income-Graduated Fixed Charge Rate Design
 - 28 Results." (PG&E Specific); and
- 29 • Exhibit Joint IOUs-01:
 - 30 – Chapter 2, "Rate Design" (Joint Investor-Owned Utility (IOU)).

31 Q 5 Does this conclude your statement of qualifications?

32 A 5 Yes, it does.

1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **STATEMENT OF QUALIFICATIONS OF MELANIE MCCUTCHAN**

3 Q 1 Please state your name and business address.

4 A 1 My name is Melanie McCutchan, and my business address is Pacific Gas
5 and Electric Company (PG&E), 300 Lakeside Drive, Oakland, California.

6 Q 2 Briefly describe your responsibilities at PG&E.

7 A 2 I am currently a Principal on PG&E's Pricing Products team. In this
8 capacity, I support PG&E's regulatory filings and customer strategy related
9 to rates and pricing.

10 Q 3 Please summarize your educational and professional background.

11 A 3 I received a Bachelor of Arts degree with a double major in Economics and
12 Environmental Sciences from the University of California at Berkeley, in
13 June 2000. In June 2009, I received a Master's Degree in International
14 Business and Environmental Policy from the University of California at
15 San Diego's Global Policy School (formerly the School of International
16 Relations and Pacific Studies).

17 I have over ten years of experience working on energy policy and rates,
18 in areas related to program management, tariffs, product management, and
19 regulatory policy and market analysis, both at PG&E (2013 to present) and
20 previously at the non-profit Center for Sustainable Energy (2010-2013).
21 Prior to that, I worked for a clean energy technology startup and before that,
22 as a Research Associate on air quality and energy policy in the binational
23 San Diego/Tijuana region at a non-profit organization. I joined PG&E in
24 April 2013 as a Senior Business Analyst in Distributed Generation Programs
25 in the Customer Energy Solutions Department.

26 Q 4 What is the purpose of your testimony?

27 A 4 I am sponsoring the following in testimony PG&E's Income Graduated Fixed
28 Charge Testimony in Track A of the Electric Demand Flexibility OIR:

- 29 • Exhibit PG&E-01:
 - 30 – Chapter 2, "PG&E Income Graduated Fixed Charge
 - 31 Implementation" (PG&E Specific); and
- 32 • Exhibit Joint IOUs-01:
 - 33 – Chapter 4, "Implementation" (Joint Investor-Owned Utility (IOU)).

- 1 Q 5 Does this conclude your statement of qualifications?
- 2 A 5 Yes, it does.

1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **STATEMENT OF QUALIFICATIONS OF ERIKA WASMUND**

3 Q 1 Please state your name and business address.

4 A 1 My name is Erika Wasmund, and my business address is Pacific Gas and
5 Electric Company (PG&E), 300 Lakeside Drive, Oakland, California.

6 Q 2 Briefly describe your responsibilities at PG&E.

7 A 2 I am a Principal Marketing Strategist for Residential Rates. My current
8 responsibilities include ongoing rate education for Time-of-Use (TOU),
9 launch and promotion of Electric Home, and overseeing research and
10 developing implementation strategies for Real Time Pricing and Fixed
11 Charge.

12 Q 3 Please summarize your educational and professional background.

13 A 3 I received a Bachelor of Arts degree in Journalism with a Minor in Survey
14 Research from California State University, Chico. I have more than
15 25 years of marketing, advertising, and public relations experience in
16 promoting brands, products, campaigns, and programs, with half of that time
17 in the energy sector. I led the transition to TOU rate plans for PG&E from
18 initial decision, through both opt-in and default pilots, and through to full
19 completion of the move to these rate plans for our residential customers.

20 Q 4 What is the purpose of your testimony?

21 A 4 I am sponsoring the following testimony in PG&E's Income Graduated Fixed
22 Charge Testimony in Track A of the Electric Demand Flexibility OIR:

- 23 • Exhibit PG&E-01:
 - 24 – Chapter 3, "PG&E Income Graduated Fixed Charge Marketing,
25 Education, and Outreach" (PG&E Specific); and
- 26 • Exhibit Joint IOUs-01:
 - 27 – Chapter 5, Marketing, Education, & Outreach" (Joint Investor-
28 Owned Utility (IOU)).

29 Q 5 Does this conclude your statement of qualifications?

30 A 5 Yes, it does.