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**PREPARED OPENING TESTIMONY OF GWENDOLYN R. MORIEN
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY**

CHAPTER 1 -- RATE DESIGN & COST RECOVERY

ERRATA

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

~~APRIL 7~~MAY 1, 2023



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ATTACHMENT A : BILL IMPACTS¹

¹ Due to resource constraints, SDG&E will provide an updated version of Attachment A at a later time. In the meantime, updated bill impacts can be found in the errata Public Tool.

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2 **ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY**
3 **CHAPTER 1 – RATE DESIGN & COST RECOVERY**

4 **I. INTRODUCTION**

5 This chapter is a supplement to the Joint Investor-Owned-Utilities (IOU) Testimony on
6 rate design issues.¹ This testimony provides the San Diego Gas & Electric Company (SDG&E)
7 specific results of the overall rate design guidance described in the Joint IOU Rate Design
8 Testimony, along with any SDG&E-specific proposals. For ease of comparison, this chapter
9 shares some of the same section headings as presented in the Joint IOU Rate Design Testimony.
10 However, not all sections included in the Joint IOU Rate Design Testimony require utility
11 specific considerations.

12 Additionally, this testimony presents SDG&E’s cost recovery proposal to ensure that its
13 income-graduated fixed charge (IGFC) proposal is revenue neutral.

14 **A. Summary of Proposals**

15 SDG&E’s specific proposals include:

- 16 • The addition of the Electrification Incentive Adjustment (EIA) rate component or
17 EIA charge, which is a policy-based charge that allows for needed \$/kWh
18 volumetric rate reduction;
- 19 • Contingent proposal for higher IGFC for Schedules EV-TOU-5 and TOU-ELEC;
- 20 • Proposal for SDG&E electric vehicle (EV) distribution rates; and
- 21 • Proposal to establish a new two-way balancing account (EIA Balancing Account
22 or “EIABA”) as part of the IGFC.

¹ See Joint IOU Testimony of Southern California Edison Company, Pacific Gas and Electric Company, and San Diego Gas & Electric Company (the Joint IOUs) Describing Income Graduated Fixed Charge Proposals, Chapter 2—Rate Design (Joint IOU Rate Design Testimony).

1 **II. SDG&E SPECIFIC RATE DESIGN PROPOSALS**

2 **A. Basis for the Average IGFC Level**

3 The Joint IOU Rate Design Testimony describes the process used for designing the
4 IOUs’ proposed IGFCs, including which rate components are appropriate for inclusion in a fixed
5 charge. Additionally, the drivers for each common IOU cost in the E3 Public Tool (Public Tool)
6 are discussed therein, as well as whether SDG&E is proposing to include that specific cost in the
7 IGFC. Certain rate components, however, are SDG&E specific. In this testimony, SDG&E
8 discusses the SDG&E-specific cost categories in the Public Tool—namely, certain other non-
9 bypassable charges (NBCs)—and whether they should be included in a fixed charge.
10 Additionally, SDG&E discusses the EIA rate component in more detail, which will allow for the
11 \$/kWh volumetric rate reduction necessary to incentivize beneficial electrification.

12 **1. Other Nonbypassable Charges**

13 The Joint IOU Rate Design Testimony discusses one NBC, the Public Purpose Programs
14 charge, that should be included in the IGFC. That testimony also discusses Other NBCs, which
15 vary by IOU, but which also may be more appropriately collected through a fixed charge because
16 they are state policy mandates and do not vary based on a customer’s kWh usage. For SDG&E,
17 these Other NBCs constitute the Wildfire Fund Charge, the Ongoing Competition Transition
18 Charge, Nuclear Decommissioning Charge (ND), Local Generation Charge (LGC), and
19 Department of Water Resources (DWR)-Bond Charge and DWR Credit. To avoid contractual
20 and statutory restrictions on potential inclusion of certain NBCs, SDG&E is proposing to include
21 LGC and ND in the IGFC.²

² See Joint Opening Brief of PG&E, SDG&E, and SCE on Statutory Interpretation Questions Posed by December 9, 2022 Ruling (January 23, 2023) at 24-27.

1 \$0.27/kWh, SDG&E needs an average residential fixed charge of \$74/month. Too little
2 reduction in the average \$/kWh volumetric rate will result in electricity prices that will not
3 incentivize beneficial electrification, which is one of the goals of the IGFC.⁴ Accordingly,
4 SDG&E proposes a new rate component, the EIA charge and credit, that will function similarly
5 to the current Total Rate Adjustment Component (TRAC) charge that creates the tiers in
6 SDG&E's existing default residential rate.

7 By maintaining the tiered rate structure, the TRAC component encourages conservation.⁵
8 Through SDG&E's TRAC component, kWh usage of less than 130% of baseline in a billing
9 cycle is charged a subsidized rate. Usage over 130% of baseline is charged a higher rate to cover
10 the cost of the subsidy by making up the difference in revenues collected under tiered rates. The
11 TRAC, using a set tier differential of 1:1.25 on a total rate basis,⁶ designs residential rates that
12 increase the Tier 2 charge and lower the Tier 1 charge such that SDG&E's total authorized
13 revenue requirements are collected.

14 The proposed EIA charge will function similarly on a revenue collection/distribution
15 basis, and will collect more revenue in a fixed charge, thus raising the average fixed charge,
16 while simultaneously lowering the \$/kWh volumetric rate. The total EIA fixed charge is
17 calculated as the difference between the average Public Tool-calculated fixed charge using the

⁴ Assembly Bill (AB) 205 (2022) Legislative Text; *see also* Administrative Law Judge Ruling Providing Guidance for Phase 1 Track A Proposals and Requesting Comments on a Consulting Services Proposals (January 17, 2023) Attachment *Phase 1 Track A: Income-Graduated Fixed Charge Guidance Memo* at 1, (“By shifting a portion of IOUs’ cost recovery to fixed charges, volumetric rates will be lower, which will increase bill affordability and encourage residential customers to adopt electrification measures.”).

⁵ *See* D.15-07-001, Findings of Fact 2 at 308.

⁶ *See id.*, Conclusions of Law 12 at 328.

1 default cost categories and the average fixed charge needed in order to reach \$0.27/kWh non-
 2 CARE average volumetric rates, as illustrated below in Table 1-2.

3 **Table 1-2**
 4 **Illustrative Electrification Incentive Adjustment Charge/Credit**

		A	B	C	D = B + C
Charge	Unit	Current	Fixed Charge Without EIA	+ EIA Charge	Total Fixed Charge
Average Fixed Charge	\$/month	\$0.00	\$50.29	\$23.71	\$74.00
Average Volumetric Rate	\$/kWh	\$0.47	\$0.33	(\$0.06)	\$0.27

5 SDG&E then calculates the revenue collected through the EIA fixed charge based on
 6 current effective sales, and calculates an equivalent \$/kWh EIA volumetric rate that will return
 7 the same amount of revenue to customers through a \$/kWh EIA credit.⁷ Table 1-3 below
 8 illustrates conceptually how the EIA fixed charge would function to redistribute the average EIA
 9 fixed charge among SDG&E’s IGFC Income Brackets. All customers would receive the same
 10 EIA volumetric rate credit, with discount adjustments made for CARE or Family Electric Rate
 11 Assistance (FERA) customers.

⁷ Using all illustrative figures, to initially set the IGFC charge and credit: if the monthly EIA fixed charge component was set at \$20 and SDG&E had 1,000,000 customers, SDG&E would forecast collecting \$240 million annually in the EIA fixed charge component. SDG&E would then divide these forecasted revenues by example illustrative forecasted volumetric residential system billing determinants: \$240 million/4,000,000,000 kWh = \$(0.06)/kWh. This \$(0.06)/kWh credit would be multiplied by every kWh a customer uses in their billing cycle and provide an additional, transparent credit against the customer’s volumetric rates.

Table 1-3
Illustrative EIA Charge⁸

	A	B = C - A	C
Income Bracket	Fixed Charge Without EIA (Excl. CARE Surcharge)	EIA Fixed Charge	Total Fixed Charge
Average Fixed Charge	\$50	\$24	\$74
1	\$50	(\$26)	\$24
2	\$50	(\$16)	\$34
3	\$50	\$23	\$73
4	\$50	\$78	\$128

The creation of the EIA will function as an electrification incentive, consistent with state policy goals, as it allows for more \$/kWh volumetric rate reduction than would otherwise be possible under the Joint IOU identified costs in the IGFC under CPUC jurisdiction. As discussed in the Joint IOU Policy Testimony, it is particularly important to make electrification more affordable than the status quo rate design.

SDG&E proposes that the base EIA fixed charge dollar amount of \$23.71/month be a set constant,⁹ but should be adjusted to account for: 1) any over/under collections in the EIA balancing account, and 2) sales forecast changes. For example, if SDG&E recorded an over-collection in the EIA balancing account in a year that amounted to a (\$0.50)/month fixed charge, the EIA fixed charge in year n+1 would equal $\$23.71 - \$0.50 = \$23.21$. As discussed in SDG&E's Cost Recovery testimony below, SDG&E plans to include these under- or over-collections in its annual Consolidated Rates Filings. Any changes to the base EIA fixed charge could be made during a General Rate Case (GRC) Phase 2. Once the level of the base EIA fixed charge is set, SDG&E would calculate the revenue collected from the EIA fixed charge based on current effective sales forecast and billing determinants.

⁸ Rounded to nearest dollar.

⁹ As converted to a \$/day charge.

1 SDG&E proposes the \$/kWh volumetric rate credit that corresponds to the base EIA
2 fixed charge would be set constant until SDG&E's next GRC Phase 2 proceeding, unless a
3 Calibration Mechanism event as described in the Joint IOU Cost Recovery Testimony occurs. If
4 no Calibration Mechanism event occurs before SDG&E's next GRC Phase 2 proceeding,
5 SDG&E proposes to reevaluate the level of the EIA in each GRC Phase 2 moving forward. This
6 proposal aims to help provide bill stability by keeping a set volumetric and set base EIA charge
7 annually, while still accounting for annual under- or over-collections and sales forecast updates.

8 As discussed in this testimony, SDG&E is requesting authority for a new balancing
9 account, the EIABA, which will balance any under- or over-collections resulting from the EIA
10 on an annual basis. SDG&E's Cost Recovery section below discusses this request in more
11 detail.

12 **D. Overall IGFC Level**

13 As calculated by the Public Tool, the IGFC would average \$74/month across the
14 SDG&E's proposed residential customer Income Brackets. Table 1-4 below shows each Federal
15 Poverty Level (FPL) income category's contribution to the overall fixed charge level, along with
16 the percentage of customers that are expected to pay that level of fixed charge based on the data
17 available in the Public Tool.

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Table 1-4
Illustrative Proposed Average Fixed Charge^{10, 11}

Category	% Of Customers	Monthly IGFC
Income Bracket 1 (<100% FPL CARE)	12%	\$24
Income Bracket 2 (All Other CARE/FERA)	15%	\$34
Income Bracket 3 (Non-CARE <=650% FPL)	50%	\$73
Income Bracket 4 (>650% FPL)	23%	\$128

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E. Income Graduated Fixed Charge Discount Levels

AB 205 requires that the fixed charge discount be set “so that a low-income ratepayer in each baseline territory would realize a lower average monthly bill without making any changes in usage.”¹² As discussed in the Joint IOU Rate Design Testimony, the Joint IOUs interpret this to mean that the average low-income customer in all baseline territories must realize at least

¹⁰ SDG&E presents IGFCs on a per-month basis for reference, but operationally, the IGFC will be charged to customers on a dollar-per-day basis, because there are slightly more billing months per year than calendar months. The IGFC as discussed here is based on 12 calendar months per year, but with an average billing month of 30 days, that results in 12.16 billing months per year. A billing month can be between 28 and 33 days depending on meter reading schedules. If a customer’s billing months average 28 days, that results in 13 billing months per year. Therefore, the monthly charge is converted to a daily charge so that the total annual collection is equal to twelve times the proposed monthly charge and customers are billed equitably.

¹¹ Shortly before filing, SDG&E noticed that the residential revenue allocation for the CARE program was being calculated as a percentage of system net determinants. However, SDG&E calculates its CARE program revenue allocation factors using system delivered determinants. Additionally, SDG&E’s Street Lighting customer class is not allocated a percentage of the CARE revenue requirement in current rates. As a result, the residential CARE contribution shown in the Public Tool is artificially low, as the Tool allocates a portion of CARE program costs to SDG&E’s Street Lighting customers, and does not use system delivered determinants to calculate the revenue allocation factor. As requested by Energy Division in the Administrative Law Judge’s Ruling Providing Additional Guidance for Track A Proposals (March 23, 2023) at Attachment *Staff Guidance Memo*, SDG&E has included “unaltered” versions of the Printable Results tabs well as a second version that includes the IOUs’ Proposal for FERA customers and the corrected SDG&E residential revenue allocation factor. SDG&E’s figures in testimony reflect this correction, and SDG&E has notified Energy Division of this issue.

¹² AB 205, as amended in Section 739.9(e)(1) of Public Utilities Code.

1 some bill savings as a result of the IGFC implementation relative to current rate design. In
2 practice, this means that the required discount level is informed by the amount of bill savings
3 realized by low-income customers in the lowest baseline usage territory. For SDG&E, that is the
4 Coastal climate zone.

5 The average annual usage of CARE customers in the Coastal climate zone baseline
6 territory, where average household usage is the lowest, is approximately 3,969 kWh per year
7 (331 kWh per month), as shown in the Public Tool. Using current effective rates¹³ and the
8 annual average usage in the Public Tool, the average monthly bill for Coastal CARE customers
9 is \$101.43/month. At the \$74 average fixed charge level, CARE volumetric rate reduction is
10 \$0.155/kWh, resulting in an average bill reduction of approximately \$51/month. This means that
11 the average low-income customer's fixed charge must be no more than that level. With this in
12 mind, SDG&E proposes an initial fixed charge of \$34/month for Income Bracket 2, and an initial
13 fixed charge of \$24/month for Income Bracket 1. Using the Public Tool, the fixed charges in
14 Income Brackets 1 and 2 result in an average fixed charge of \$29.40/month for CARE
15 customers, and results in an overall average bill reduction of approximately (\$19)/month, in
16 compliance with AB 205's requirement described above. Table 1-5 below shows the monthly
17 CARE bill impacts for each of SDG&E's climate zones and on average.

¹³ Rates effective January 1, 2023 per Advice Letter 4129-E, as recalculated by the Public Tool on the "Modeled Existing Rates" tab.

Table 1-5: Monthly Bill Impacts of IGFC on CARE Customers on TOU-DR1

Baseline Territory	<100% FPL CARE	Other CARE	All CARE
All SDG&E	(\$25)	(\$15)	(\$19)
Coastal	(\$18)	(\$8)	(\$13)
Inland	(\$31)	(\$20)	(\$25)
Mountain	(\$88)	(\$77)	(\$83)
Desert	(\$79)	(\$72)	(\$78)

Determining the fixed charges for the two lowest Income Brackets allows for design of the remaining two proposed Income Brackets. SDG&E’s proposed IGFC is revenue neutral based on the income distribution data available. SDG&E’s Income Bracket 4 is designed to apply to between 20-25% of customers, using income distribution data in the Public Tool, with 23% of customers falling into this category. Importantly, the Commission must consider the relationship between both (1) the IGFC and income bracket sizes (i.e., percentage of customer base) for Bracket 3 and Bracket 4, and (2) the reduction in bills for customers in Bracket 1 and Bracket 2. There is an inverse relationship between (1) and (2), and reductions in the higher income fixed charges will result in reduced bill savings for lower income customers, all else equal.

F. Impact of the IGFC on Rates and Other Rate Design Issues

1. Most Rates Should Have an Equal Cents Reduction

SDG&E proposes that, for all rate schedules except EV-TOU-5, EV-TOU-2, and EV-TOU, the revenue from the fixed charge be applied as an equal-cents reduction in the underlying \$/kWh volumetric rate, as none of the costs proposed to be collected through the fixed charge are currently time-differentiated in these rates. SDG&E’s EV schedules, however, require additional consideration.

1 **2. Rate Design for EV Rates**

2 Currently, unlike other residential rates, which have the same distribution charges in all
3 time-of-use (TOU) periods, the distribution rates for Schedules EV-TOU-5, EV-TOU-2, and EV-
4 TOU are time-differentiated in order to provide an incentive for customers to charge their EVs
5 during low-cost hours. SDG&E was ordered in Resolution E-4989, based on Commission
6 policy, to adjust its distribution rates for EV-TOU-2 and EV-TOU to implement distribution
7 rates that vary by TOU period.¹⁴ Additionally, the current the distribution rate in the Super Off-
8 Peak period for Schedule EV-TOU-5 is set below distribution marginal cost to incentivize EV
9 charging during these times. In this proceeding, SDG&E proposes that the time-differentiated
10 distribution rates in its EV rates be adjusted to have an equal distribution rate across TOU
11 periods, consistent with the distribution \$/kWh volumetric rate in its other rate schedules. The
12 Commission’s Proposed Decision Adopting Electric Rate Design Principles and Demand
13 Flexibility Principles supports this change: Rate Design Principle (RDP) 9 states “[r]ate design
14 should not be technology-specific and should avoid creating unintended cost shifts.”¹⁵
15 SDG&E’s proposal in this testimony adjusts distribution rates in all TOU periods so that
16 distribution rates are at least equal to SDG&E’s marginal distribution demand costs, which will
17 create technologically neutral rates and comply with the Commission’s proposed RDPs.

18 Per the Public Tool, SDG&E’s proposed distribution volumetric rate recovering marginal
19 distribution demand costs for its default residential rate (and all of its non-EV rates) is
20 \$0.038/kWh. SDG&E proposes to set the distribution volumetric rate for these three EV
21 schedules equal to the default residential distribution volumetric rate, which will ensure that

¹⁴ See, SDG&E Advice Letter 3293-E, effective March 28, 2019.

¹⁵ Proposed Decision Adopting Electric Rate Design Principles and Demand Flexibility Design Principles, Ordering Paragraph (OP) 1(i) at 36.

SDG&E is recovering marginal distribution demand costs in all TOU periods. Maintaining TOU rate ratios (differentials) that results in \$/kWh volumetric rates that are lower than SDG&E's marginal distribution demand costs, as is the case with SDG&E's current EV-TOU-5 rate schedules, allows for embedded rate subsidies. SDG&E proposes that any such subsidies be avoided or eliminated. Table 1-6 below shows SDG&E's distribution rate design proposal for these three rate schedules.

Table 1-6
Proposed Total Volumetric Distribution Rates for EV-TOU, EV-TOU-2, and EV-TOU-5¹⁶

Rate Schedule	Unit	Current Total Distribution Rates (1/1/2023)	Proposed Total Distribution Rates
EV-TOU/EV-TOU-2			
Energy Charge			
On-Peak	\$/kWh	0.182	0.038
Off-Peak	\$/kWh	0.182	0.038
Super Off-Peak	\$/kWh	0.073	0.038
EV-TOU-5			
Energy Charge			
On-Peak	\$/kWh	0.166	0.038
Off-Peak	\$/kWh	0.166	0.038
Super Off-Peak	\$/kWh	0.015	0.038

In the event the Commission adopts a lower average IGFC than SDG&E is proposing, SDG&E proposes to reduce the current distribution volumetric rates on an equal cents-per-kWh basis but set the super off-peak TOU period rate for Schedules EV-TOU, EV-TOU-2, and EV-TOU-5 no lower than marginal cost, which will help to avoid bill volatility for current EV customers and continue to encourage electrification.

¹⁶ Current rates effective January 1, 2023 per Advice Letter 4129-E. Summer and winter rates are the same.

1 **3. Adjusting the IGFC Over Time**

2 SDG&E has no proposals beyond those discussed in Joint IOU Rate Design Testimony.

3 **4. CARE Discount Structure Changes**

4 SDG&E has no specific proposals beyond that outlined in Joint IOU Rate Design
5 Testimony. SDG&E’s existing CARE discount is set at the statutory maximum of 35%. In
6 context of its IGFC proposal, SDG&E is not proposing to alter this percentage, but reserves the
7 right to suggest changes to the CARE discount percentage in response to other party proposals.
8 Under SDG&E’s proposal, the 35% discount limit will apply to non-exempt volumetric charges.
9 A CARE customer will therefore see: 1) a discounted fixed charge (Income Brackets 1 or 2); 2)
10 exemptions from specific charges, including the CARE surcharge, SGIP, and the DWR Bond
11 Charge and Non-bypassable Wildfire Fund Charge; and 3) discounted volumetric rates consistent
12 with the current CARE discount. The discount on the IGFC for CARE customers exceeds 35%;
13 therefore, the IOUs are proposing to partially fund this IGFC discount with the CARE program,
14 such that the overall CARE surcharge amount remains unchanged and the remainder of the
15 CARE IGFC discount is funded through the IGFC. This will maintain existing customer class
16 CARE program revenue allocation factors.

17 **5. Implementation of the IGFC on Non-Default Rates**

18 SDG&E has no proposals beyond those discussed in Joint IOU Rate Design Testimony.

19 **6. Considerations for Higher Fixed Charges on Certain Residential Rate**
20 **Schedules that Currently Have Fixed Charges**

21 As described in Joint IOU Rate Design Testimony, if the Commission adopts SDG&E’s
22 proposal, then the IGFCs for Schedules EV-TOU-5 and TOU-ELEC should be set at the same
23 level as all other rates. However, SDG&E proposes contingent treatment of the EV-TOU-5 and
24 TOU-ELEC tariffs if the SDG&E proposal is not accepted and the Commission instead adopts a

1 much lower IGFC. Schedules EV-TOU-5 and TOU-ELEC tariffs, which currently have a
2 \$16/month fixed charge, should always include at least \$16 of fixed distribution charges for the
3 non-CARE population segment, plus any other components in the default IGFC. This treatment
4 would retain the electrification benefits of a lower average volumetric rate in these rates.

5 **7. Calibration Mechanism for Structure Revisit**

6 SDG&E has no specific proposals beyond what is described in Joint IOU Rate Design
7 Testimony.

8 **8. Size Differentiation**

9 SDG&E has no specific proposals beyond what is described in Joint IOU Rate Design
10 Testimony.

11 **9. Family Electric Rate Assistance (FERA) Interaction with IGFC**

12 SDG&E has no specific proposals beyond what is described in Joint IOU Rate Design
13 Testimony.

14 **10. Elimination of Minimum Bills**

15 SDG&E has no specific proposals beyond what is described in Joint IOU Rate Design
16 Testimony.

17 **G. Discussion of Public Tool Model Results and IOU Specific Bill Impact** 18 **Studies**

19 Pursuant to the March 23, 2023 Staff Guidance Memo, SDG&E is providing its Public
20 Tool results from the “Printable Results” tab in Attachment B to the Joint IOUs’ Testimony.¹⁷ In
21 addition, Attachment B of the Joint IOU Testimony also includes a version of these outputs that
22 includes model changes to reflect the Joint IOUs’ Proposal for FERA fixed charges, which

¹⁷ See Administrative Law Judge’s Ruling Providing Additional Guidance for Track A Proposals (March 23, 2023) at Attachment *Staff Guidance Memo*.

cannot be calculated in the default version of the model, as well as SDG&E’s Residential CARE revenue requirement allocation factor update.

Table 1-7 below sets forth SDG&E’s monthly bill impacts for each IGFC bracket and climate zone in its service territory, which is an output from the “Heat Map Results” tab in the Public Tool. The results show significant savings for SDG&E’s low- and moderate-income customers.¹⁸ High income customers see bill increases, on average. Reducing the bill impacts to the average high-income customer would require: 1) reducing the benefits that average low- and moderate-income customers see, making the IGFC less progressive; or 2) reducing the overall average fixed charge, which would increase the average volumetric rate above \$0.27/kWh and fail to provide the necessary \$/kWh volumetric rates to incentivize electrification.

Table 1-7: Average Monthly Bill Impacts – TOU-DR1¹⁹

Baseline Territory	Bracket 1: <100% FPL CARE	Bracket 2: Other CARE	Bracket 1+2: All CARE	Bracket 3: Moderate Income	Bracket 4: High Income
All SDG&E	(\$25)	(\$15)	(\$19)	(\$6)	\$56
Coastal	(\$18)	(\$8)	(\$13)	(\$4)	\$56
Inland	(\$31)	(\$20)	(\$25)	(\$9)	\$56
Mountain	(\$88)	(\$77)	(\$83)	(\$37)	\$37
Desert	(\$79)	(\$72)	(\$78)	(\$8)	\$62

As highlighted in the Total Energy Burden section below, SDG&E’s proposal makes electrification more affordable relative to the status quo today, including for higher-income customers that may initially see a higher average bill with implementation of the IGFC. These customers can benefit from the reduced volumetric rate that results from SDG&E’s proposed \$74/month average fixed charge as they electrify. As consumption increases under

¹⁸ On average, annual bill savings range between ~\$75 - \$300 for Income Brackets 1 through 3.

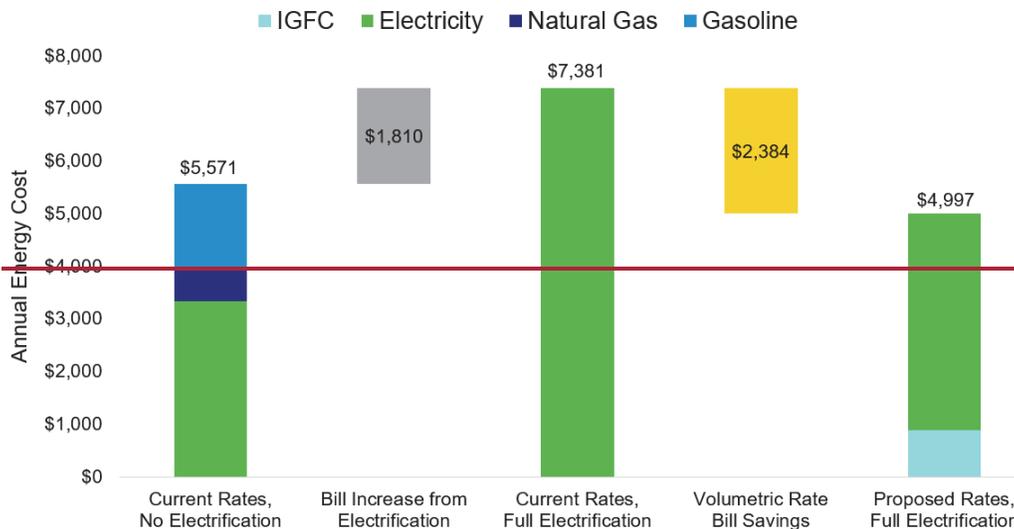
¹⁹ Table 1-7 relies on the default version of the model with one modification for SDG&E’s CARE residential revenue allocation factor; because the default version of the model cannot model the utility proposal for FERA customers, they are not included in this table.

1 electrification, each incremental kWh consumed is charged a non-CARE average rate of
 2 \$0.27/kWh vs. \$0.47/kWh.

3 **1. Total Energy Burden**

4 Using a version of the Public Tool modified only to correct the CARE residential revenue
 5 allocation, Figures 1-1 and 1-2 below highlight the bill increase for an average non-CARE
 6 customer under today’s status quo rate design. Per the Public Tool, the average non-CARE
 7 customer that fully electrifies their home and one vehicle would see an increase in total annual
 8 energy cost of ~~over approximately~~ \$1,800, \$1,500 per year. Under SDG&E’s proposed rate design,
 9 these same customers would see significant bill savings, compared to full electrification under
 10 current rate design. The average non-CARE customer that fully electrifies their home and one
 11 vehicle could see annual bill savings of \$1,688 – \$2,384 compared to today’s rate structure,
 12 depending on income bracket.

13 **Figure 1-1: Illustrative Annual Average Energy Burden –**
 14 **Income Bracket 3 Customer with Default Public Tool Assumptions**
 15 **and CARE Revenue Allocation Correction²⁰**



16 ²⁰ All scenarios in this section assume the customer is taking service on TOU-DR1 and uses a weighted average of inland and coastal customers per the populations in the Public Tool for each Income Bracket. Electrification cases assume a fully electrified home and one EV with managed charging.

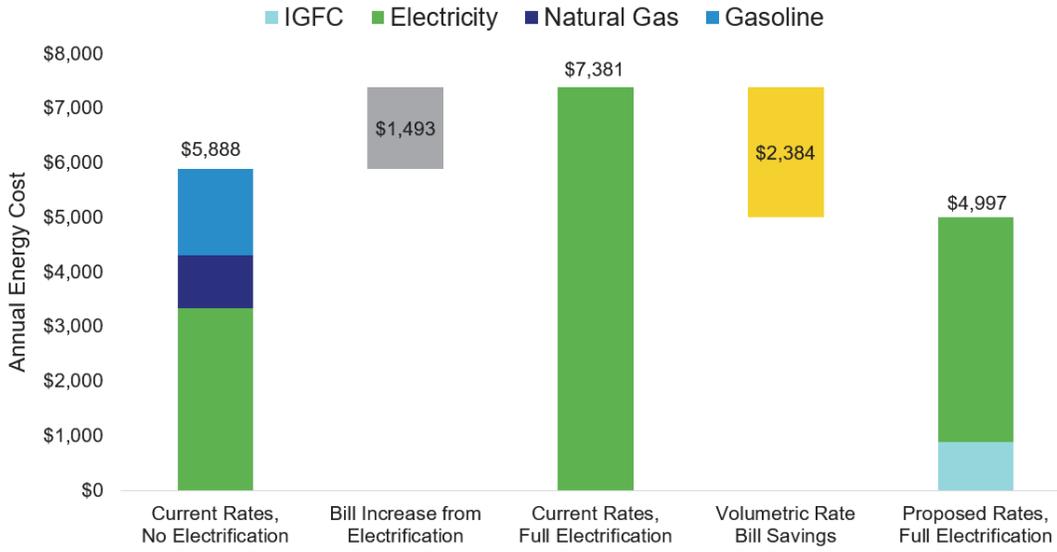
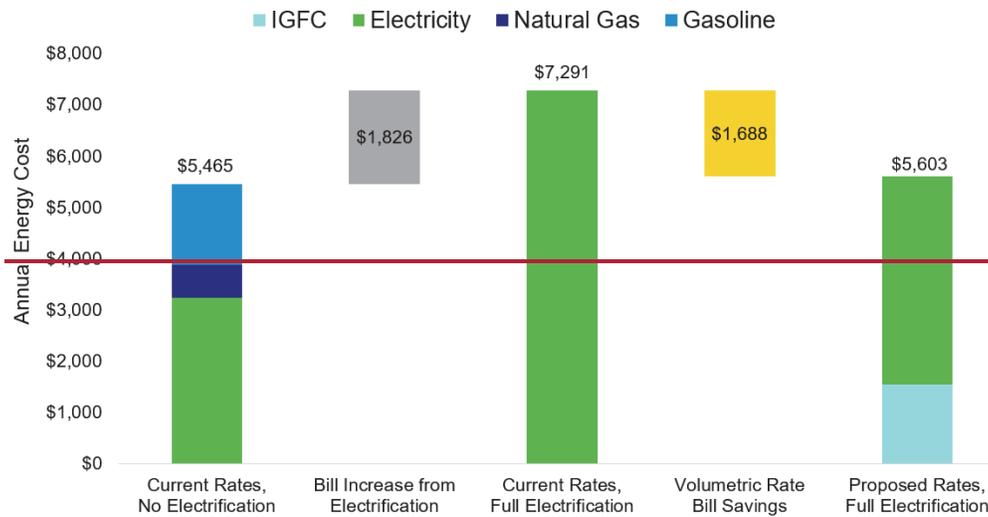
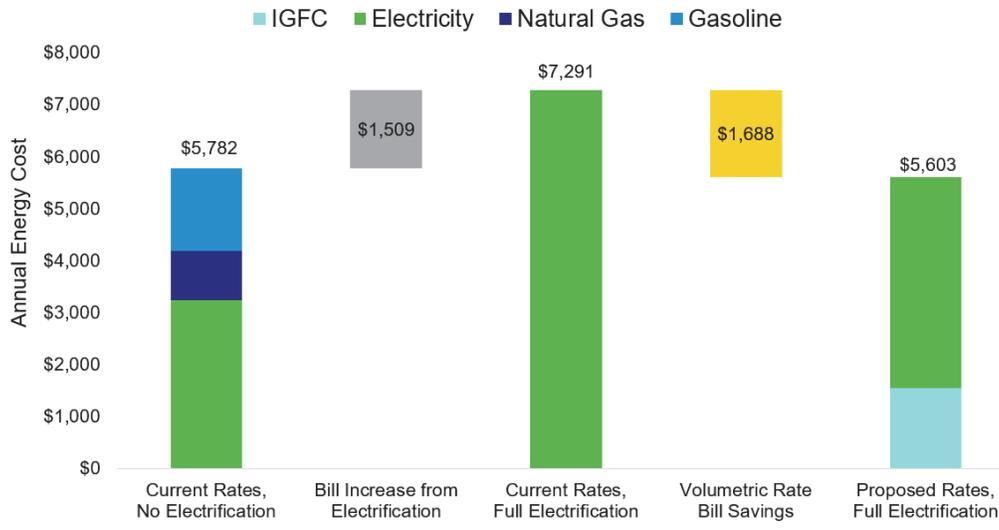


Figure 1-2: Illustrative Annual Average Energy Burden – Income Bracket 4 Customer with Default Public Tool Assumptions and CARE Revenue Allocation Correction





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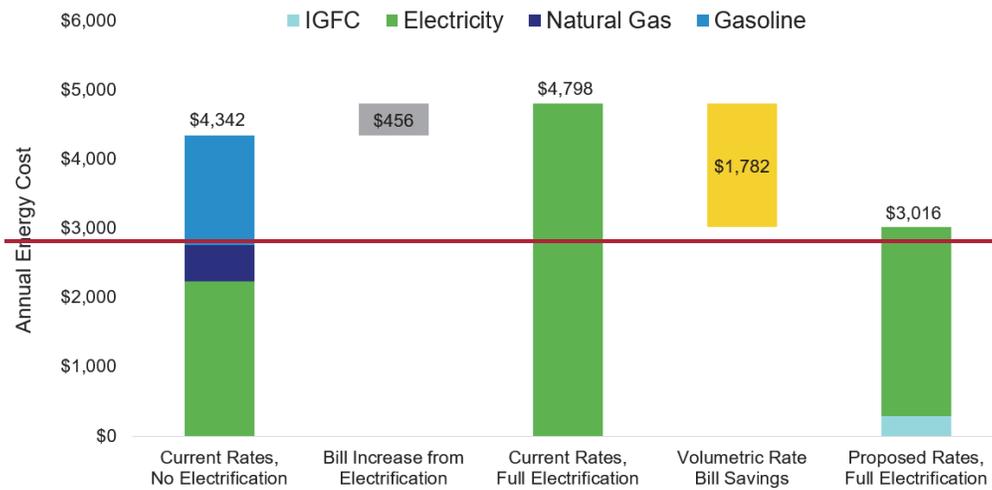
Similarly, customers in the first two income brackets would see significant savings (between \$1,700 and \$1,782 per year) with SDG&E’s proposal, relative to full electrification under the current rate structure.

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Figure 1-3: Illustrative Annual Average Energy Burden – Income Bracket 1 Customer with Default Public Tool Assumptions and CARE Revenue Allocation Correction



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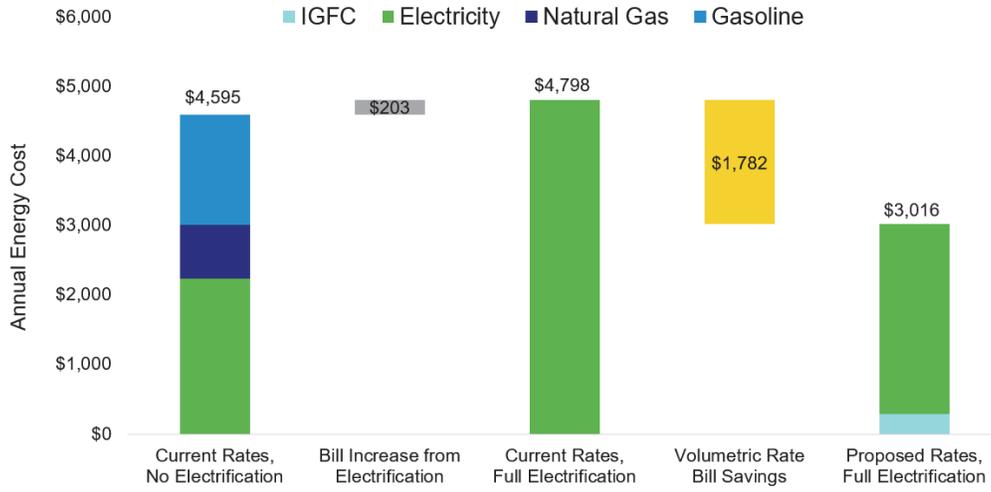
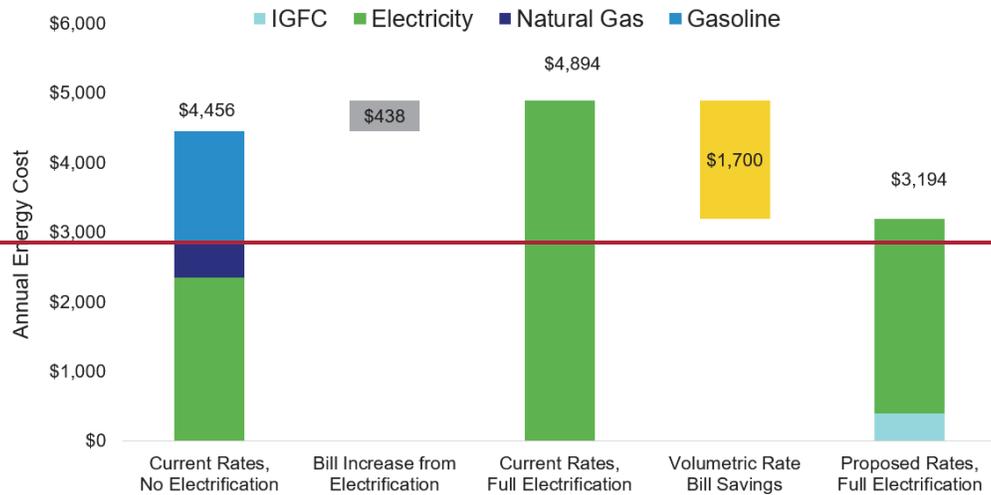
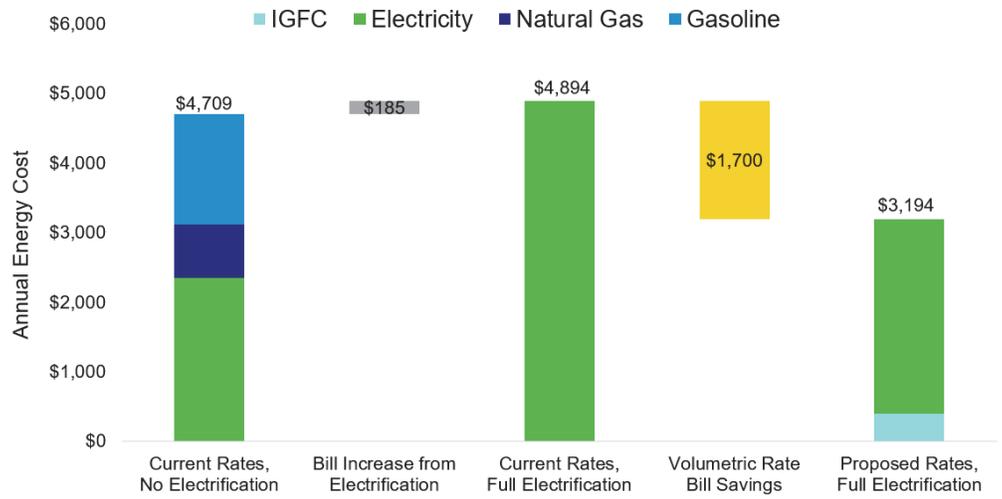


Figure 1-4: Illustrative Annual Average Energy Burden – Income Bracket 2 Customer with Default Public Tool Assumptions and CARE Revenue Allocation Correction





SDG&E also analyzed the impact of electrification using alternative market inputs more in line with current market data and customer annual usage more aligned with historical customer usage data. First, the Public Tool assumes a gasoline price of \$4.00/gallon. Per Energy Information Administration data, the monthly average price of gasoline for all grades has consistently been above \$4.00/ gallon since May 2021.²¹ SDG&E’s updated electrification analysis assumes a gasoline price of \$4.79/gallon.²² Second, SDG&E updated the Public Tool’s assumed 35 miles per gallon (mpg) for an internal combustion engine (ICE) vehicle. As highlighted in the Environmental Protection Agency 2022 automotive trends report, in 2021, average fuel economy was 25.4 mpg in the U.S.²³ SDG&E’s updated electrification analysis assumes an ICE vehicle of 25.4 mpg.²⁴ ~~Third, the Public Tool assumes Transmission and Public Purpose Program (PPP) natural gas rates of \$1.05/therm. However, the tariff linked in the model~~

²¹ eia.gov, California Gasoline and Diesel Retail Prices, available at https://www.eia.gov/dnav/pet/pet_pri_gnd_dcus_sca_m.htm.

²² March 2023 monthly average gasoline price in California for all grades per eia.gov. This update was made in cell D3 on the “Gasoline Inputs” Tab.

²³ EPA, The 2022 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975, Executive Summary (December 2022), available at <https://www.epa.gov/system/files/documents/2022-12/420s22001.pdf>.

²⁴ This update was made in cell D4 on the “Gasoline Inputs” Tab of the Public Tool.

1 ~~showed that the gas Procurement charge, rather than the Transmission charge, was being~~
2 ~~incorrectly used to calculate bills in the model.²⁵ Bill impact calculations also incorrectly~~
3 ~~excluded gas PPP rates. SDG&E updated natural gas prices to reflect the correct rates of~~
4 ~~~\$1.65/therm.^{26,27} Finally, SDG&E noticed the Inland climate zone customer usage being used~~
5 to calculate bill impacts on the Public Tool’s “Electrification Dashboard” tab was significantly
6 higher than the usage being utilized for Inland customer bill impacts on the “Heat Map Results”
7 tab.²⁸ SDG&E updated this assumption to align with historical averages.²⁹

8 With these updates, SDG&E sees the same general trends as it does using the
9 assumptions in the model, but these modifications produce results that are more aligned with the
10 bill impacts an average customer would see when contemplating electrification investments.
11 Figures 1-5 through 1-8 show the same information as Figures 1-1 through 1-4 but include the
12 inputs from SDG&E’s updated electrification analysis.

²⁵ ~~SDG&E discovered this discrepancy shortly before submitting this proposal and has informed Energy Division of the issue. This error has been corrected in the errata Public Tool.~~

²⁶ ~~This update was made in cells E7:E31 on the “Gas Rates” Tab of the Public Tool.~~

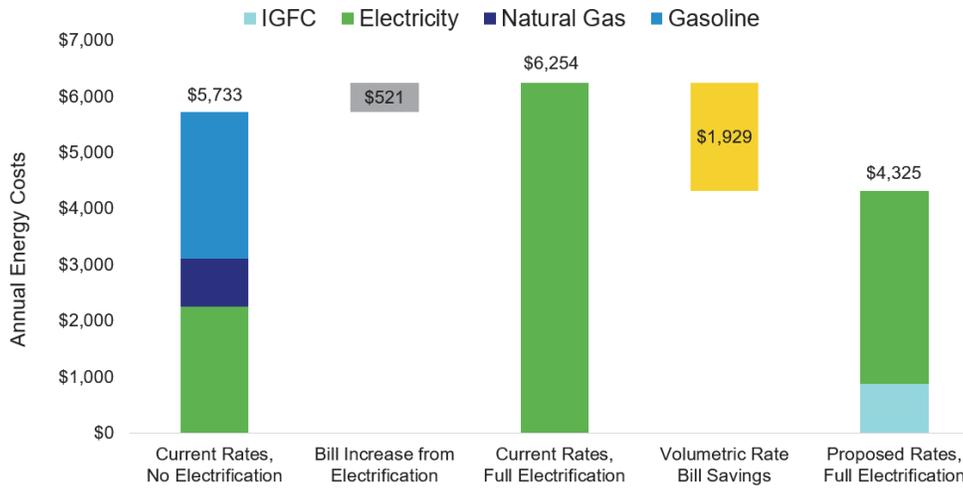
²⁷ ~~Per SDG&E Schedule GR, current baseline Transmission rate is \$1.56481/therm, available at https://tariff.sdge.com/tm2/pdf/tariffs/GAS_GAS_SCHEDS_GR.pdf. Per SDG&E Schedule G PPPS, the residential non-CARE, PPP rate is \$0.0881/therm, available at https://tariff.sdge.com/tm2/pdf/tariffs/GAS_GAS_SCHEDS_G_PPPS.pdf.~~

²⁸ Annual Inland customer usage (pre-electrification) in the default Public Tool Electrification Bill Impacts was 9,706, or 809 kWh/month. However, the counterfactual annual load being used to calculate fixed charge bill impacts was 5,460 kWh/year, or approximately 455 kWh/month, which is more aligned with the data SDG&E provided for the Public Tool. SDG&E brought this discrepancy to Energy Division’s attention and was instructed the impacts were illustrative. However, SDG&E believes the illustrative bill impacts shown should reflect actual customer usage in that cohort, and therefore is including the usage profile with lower annual usage in this updated assumptions analysis.

²⁹ This update was made in column J of the “Elect. 8760 Load Profiles kWh” tab. SDG&E also updated columns P and V by adding the updated hourly profile in column J to the incremental load originally provided in the Public Tool under the fully electrified and electric space and water heater scenarios.

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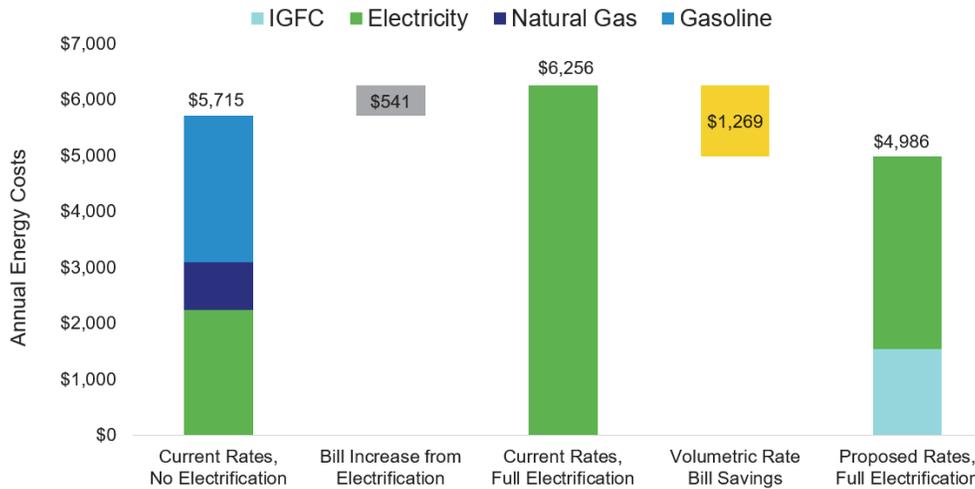
**Figure 1-5: Illustrative Annual Average Energy Burden –
Income Bracket 3 Customer, Updated Public Tool Electrification Assumptions,
with CARE Revenue Allocation Correction**



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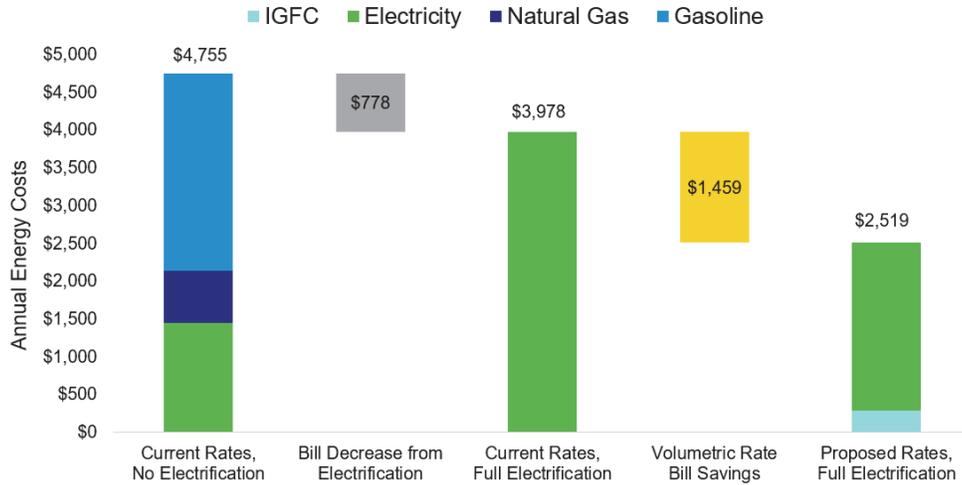
**Figure 1-6: Illustrative Average Annual Energy Burden –
Income Bracket 4 Customer, Updated Public Tool Electrification Assumptions,
with CARE Revenue Allocation Correction**



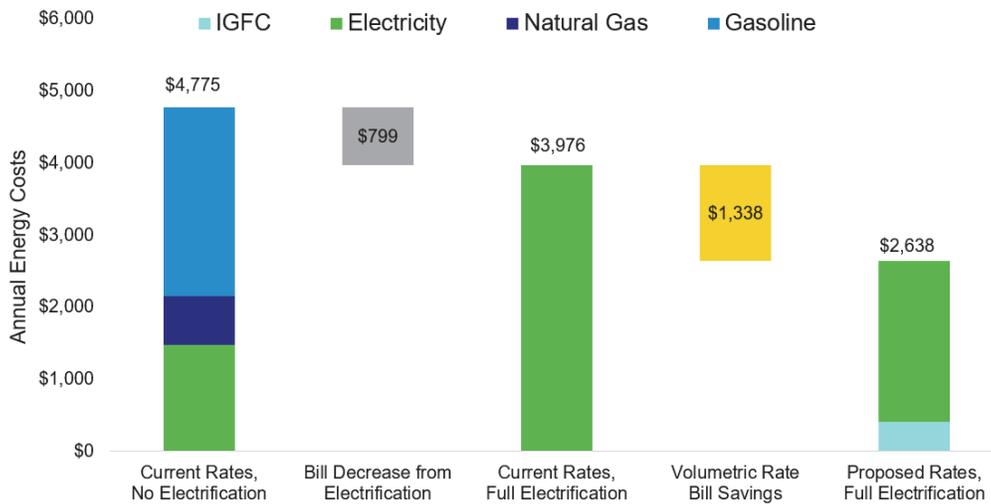
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1 **Figure 1-7: Illustrative Average Annual Energy Burden –**
 2 **Income Bracket 1 Customer, Updated Public Tool Electrification Assumptions,**
 3 **with CARE Revenue Allocation Correction**



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 5 **Figure 1-8: Illustrative Average Annual Energy Burden –**
 6 **Income Bracket 2 Customer, Updated Public Tool Electrification Assumptions,**
 7 **with CARE Revenue Allocation Correction**



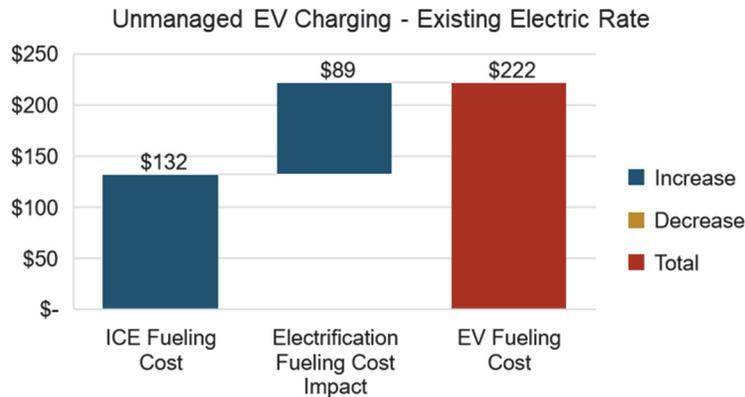
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 9 **2. Public Tool Charts**

10 SDG&E includes the charts from the [errata](#) Public Tool’s “Electrification Dashboard” tab
 11 below, as provided by Energy Division.³⁰ All scenarios assume a customer is taking service on

³⁰—Shortly before filing, SDG&E noticed an issue with the load profiles used to calculate the monthly baseline credit (\$/month) that feeds into the bill impacts on the “Electrification Dashboard” tab of the

1 Schedule TOU-DR1 and has an Income Bracket 4 IGFC. Other electrification scenarios from
 2 the Public Tool are included in Attachment A to this testimony. Figure 1-9 presents default
 3 Public Tool assumptions and Figure 1-10 displays SDG&E’s updated inputs. All scenarios
 4 include SDG&E’s CARE Revenue Allocation correction. Under SDG&E’s proposed rates,
 5 customers adopting EVs will see significant bill savings for both unmanaged and managed EV
 6 charging in Figures 1-9 and 1-10, seeing approximately \$93 in savings per month when adopting
 7 an EV in an unmanaged charging scenario, and approximately \$92 in savings in a managed
 8 charging scenario, relative to existing rates. Figures 1-9 and 1-10 also highlight significant
 9 savings when an average customer switches from an ICE vehicle to an EV under SDG&E’s
 10 proposal relative to existing rates, which can help incentivize EV adoption.

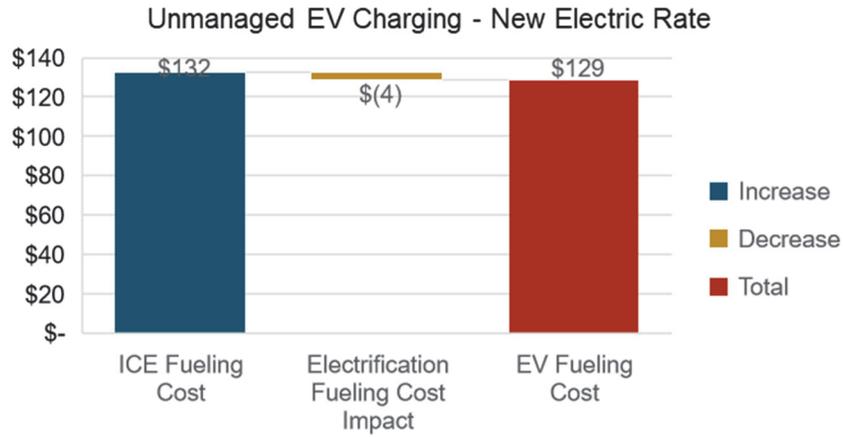
11 **Figure 1-9: Impact of IGFC on EV Charging Costs on Non-CARE Coastal Customers,**
 12 **Default Public Tool Electrification Assumptions, with CARE Revenue Allocation**
 13 **Correction**



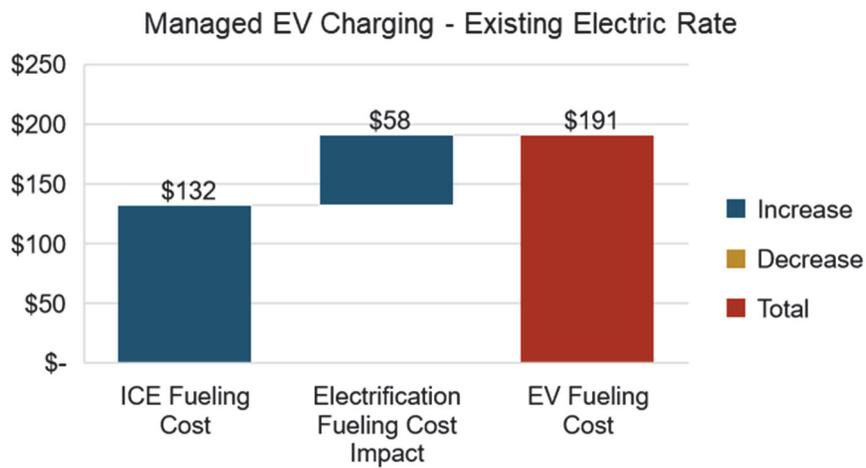
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~~Public Tool. SDG&E was unable to correct this error before filing and has informed Energy Division of this issue. SDG&E believes this error does not have a material impact on the managed charging scenarios but may have an impact on the unmanaged charging scenarios presented.~~

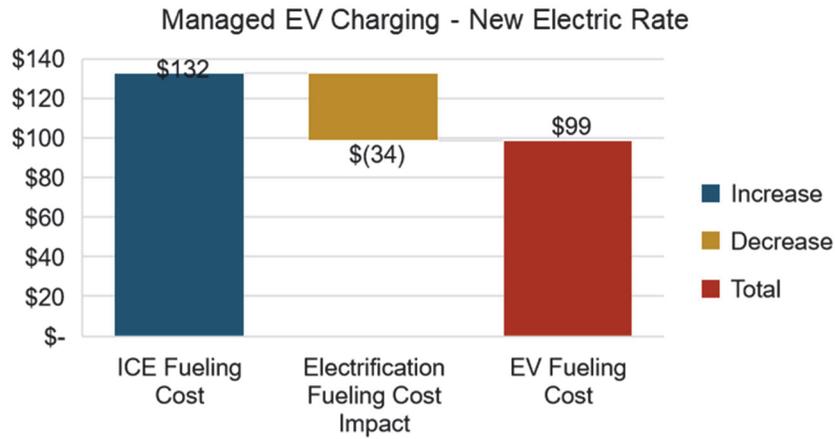
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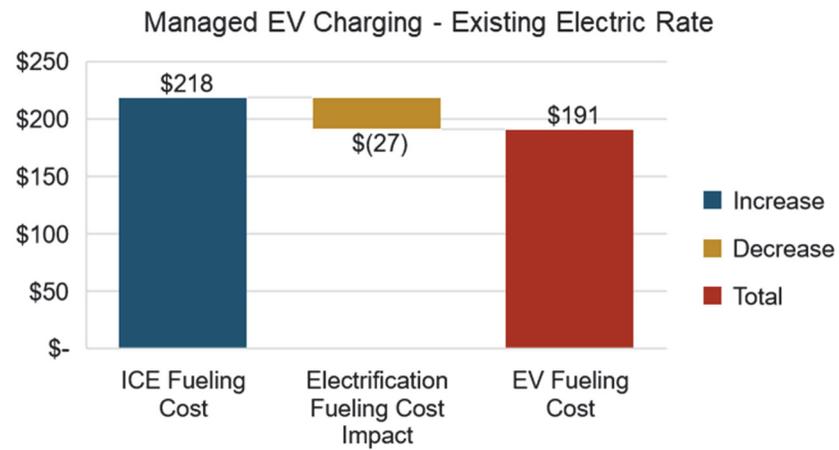
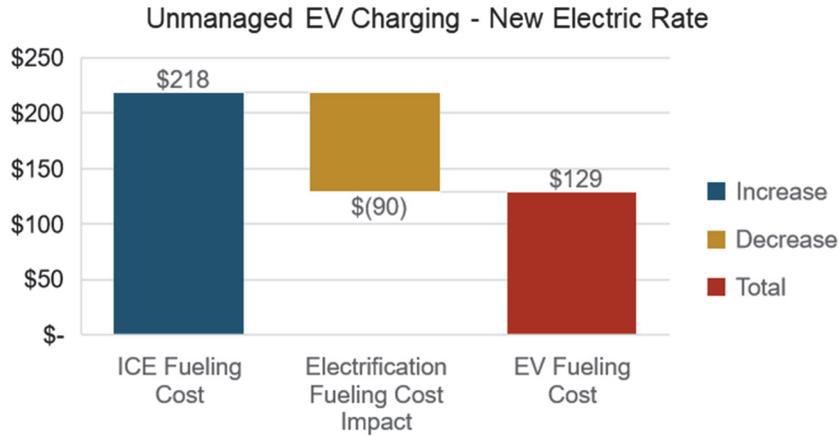
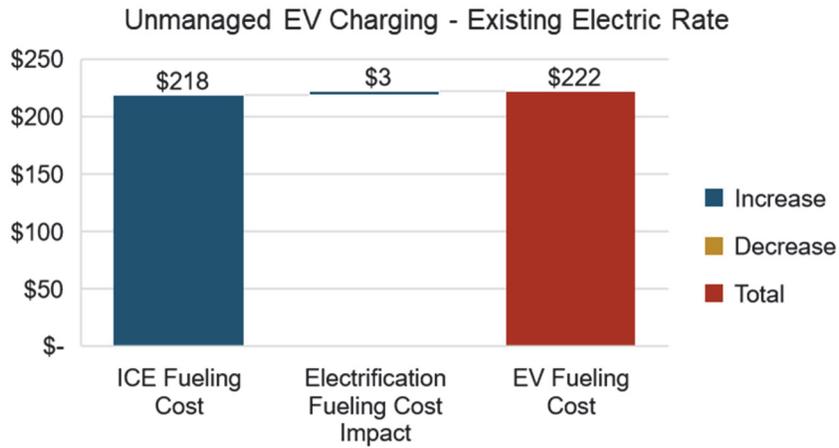


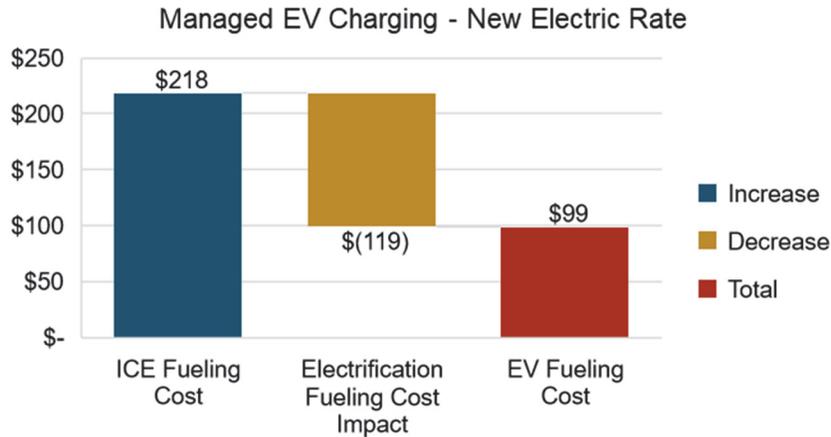
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1 **Figure 1-10: Impact of IGFC on EV Charging Costs on Non-CARE Coastal Customers,**
 2 **Updated Public Tool Electrification Assumptions, with CARE Revenue Allocation**
 3 **Correction**





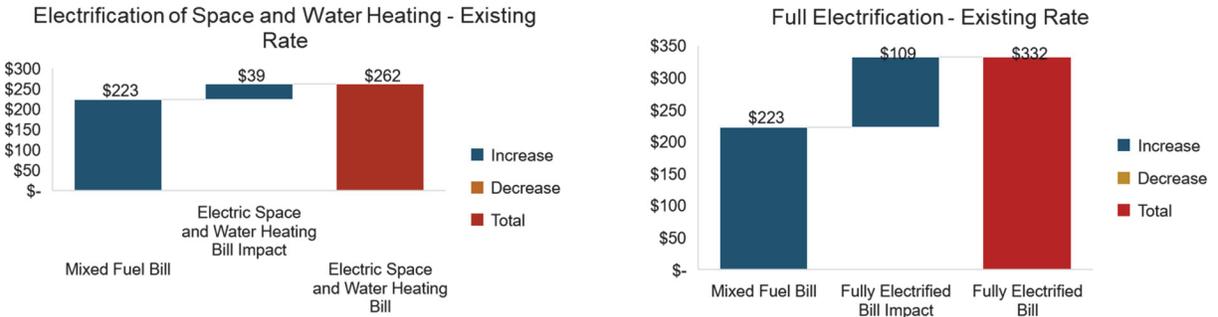
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Figures 1-11 through 1-~~12~~¹⁴ highlight the impact of SDG&E’s IGFC proposal on building electrification for Income Bracket 4 customers. Since customers in Income Brackets 1 – 3 pay a lower IGFC but still receive the benefit of significantly lower rates, customers in these brackets could see a better value proposition for building electrification than the results listed below, all else equal.

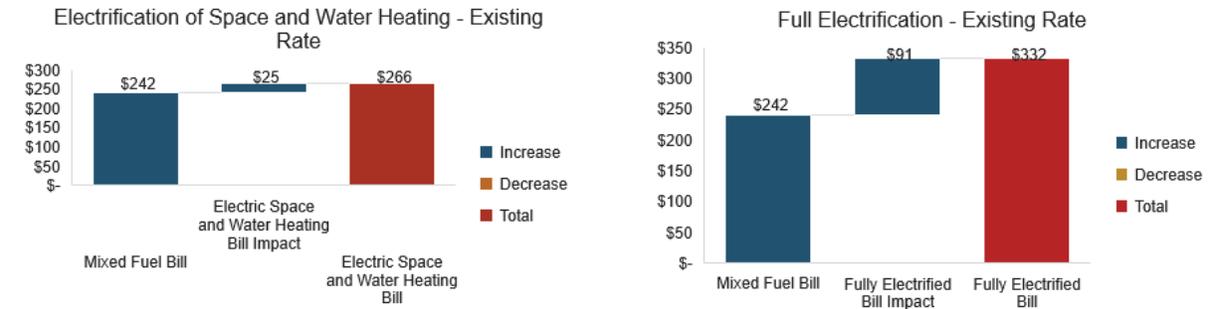
SDG&E presents the impacts of its IGFC proposal on building electrification for Coastal customers in Figure 1-11, using the results in the Public Tool’s “Electrification Dashboard” tab. Under current rates and using the default Public Tool inputs, Non-CARE Coastal customers would see a ~~\$3925~~/month increase in their average bills when electrifying their space and water heating, and a ~~\$10991~~/month increase in their average bills under the full electrification scenario. Under SDG&E’s proposal and the default Public Tool inputs, this subgroup of customers ~~only~~ sees a ~~\$4(10)~~/month ~~increase~~~~decrease~~ when electrifying their space and water heating, and a ~~\$4123~~/month increase under the full electrification scenario. SDG&E presents the impacts of the proposed IGFC on building electrification for non-CARE Inland customers in Figure 1-12. These customers see a bigger bill decrease under SDG&E’s proposal when electrifying space and water heating, and a ~~\$14(5)~~/month bill ~~increased~~~~decrease~~, as opposed to a ~~\$6847~~/month bill increase, under the full electrification scenario.

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Figure 1-11: Impacts of IGFC on Building Electrification for Non-CARE Coastal Customers, Default Public Tool Electrification Assumptions, with CARE Revenue Allocation Correction

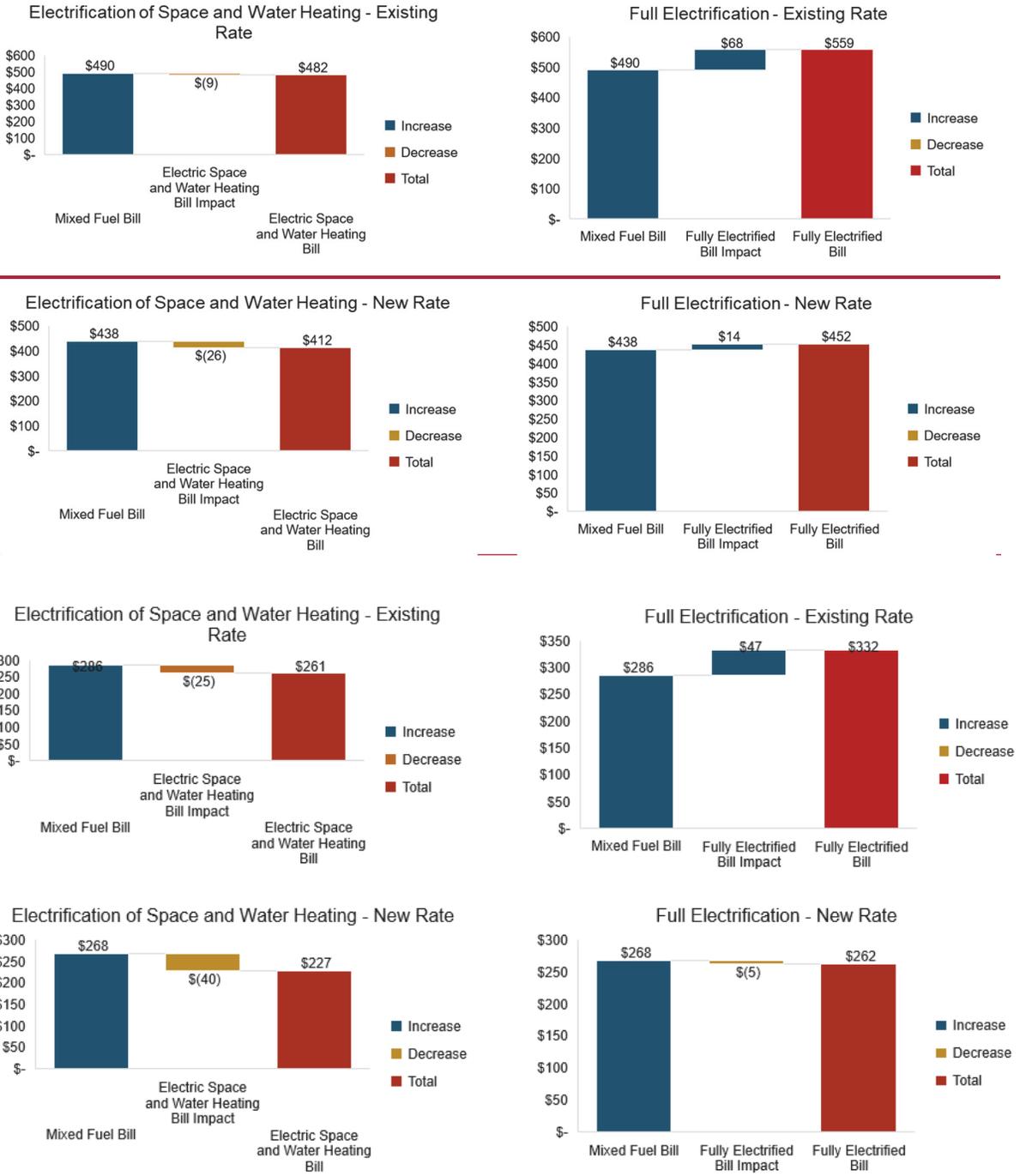


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Figure 1-12: Impacts of IGFC on Building Electrification for Non-CARE Inland Customers, Default Public Tool Electrification Assumptions, with CARE Revenue Allocation Correction

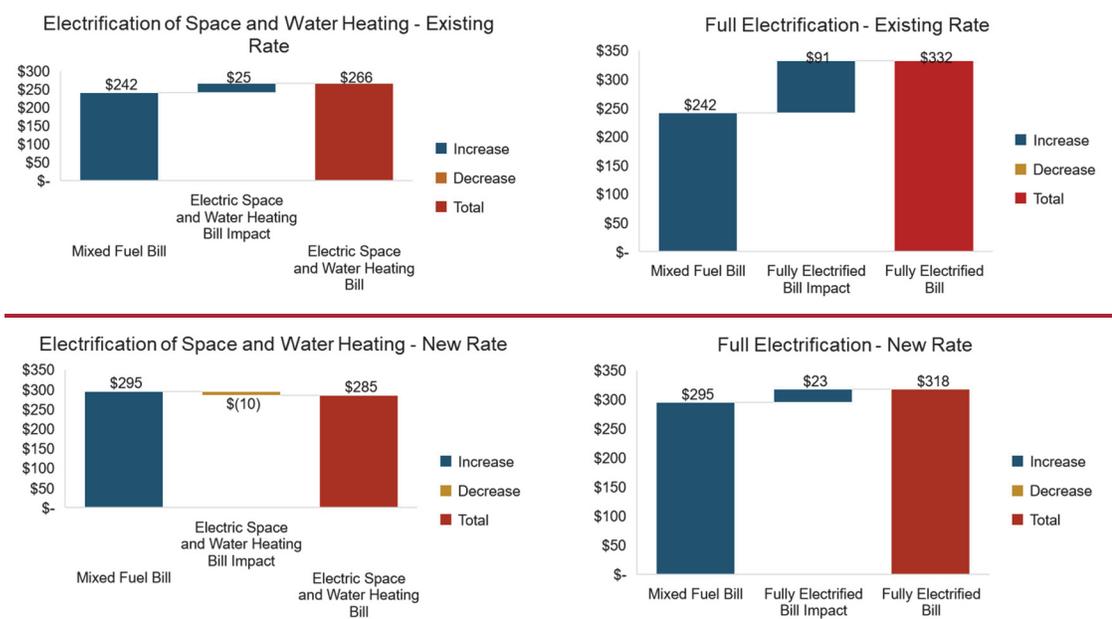


~~Figures 1-13 and 1-14 present the same information as Figures 1-11 and 1-12 but include SDG&E's updated inputs for natural gas. As displayed in Figure 1-13, under SDG&E's~~

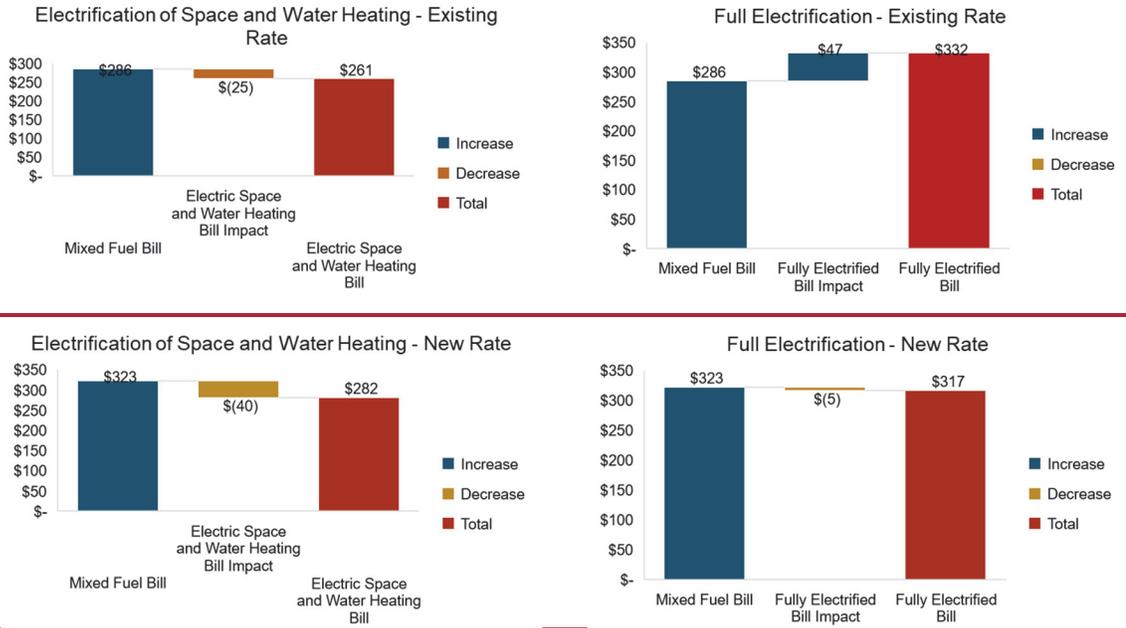
1 ~~proposed IGFC, an average non-CARE Coastal customer would see a bill decrease of~~
 2 ~~(\$10)/month when electrifying space and water heating compared to a bill increase of \$25/month~~
 3 ~~under the current rate structure. Under SDG&E's proposal and full electrification, these~~
 4 ~~customers would see a bill increase of \$23/month, as opposed to the \$91/month increase they~~
 5 ~~would see under the current rate structure.~~

6 The trend is similar for an average non-CARE Inland customer as presented in Figure 1-
 7 ~~1412~~. Under SDG&E's proposal, these customers would see (\$40)/month decrease in bills when
 8 electrifying their space and water heating, as opposed to a (\$25)/month decrease under the
 9 current structure. The same customers would see a bill decrease of (\$5)/month under SDG&E's
 10 proposal with full electrification, as opposed to an increase of \$47 under the current rate
 11 structure.

12 ~~**Figure 1-13: Impacts of IGFC on Building Electrification for Non-CARE Coastal**~~
 13 ~~**Customers, Updated Public Tool Electrification Assumptions, with CARE Revenue**~~
 14 ~~**Allocation Correction**~~



15
 16 ~~**Figure 1-14: Impacts of IGFC on Building Electrification for Non-CARE Inland**~~
 17 ~~**Customers, Updated Public Tool Electrification Assumptions, with CARE Revenue**~~
 18 ~~**Allocation Correction**~~



III. COST RECOVERY

A. Electrification Incentive Adjustment (EIA) Balancing Account

This section discusses SDG&E’s proposal to establish a new two-way balancing account (EIA Balancing Account or “EIABA”) as part of the IGFC. It is important to note that the EIA is designed to be revenue neutral in a given year: it merely shifts revenues collected in \$/kWh volumetric rates to a fixed charge. Yet, differences in forecasted sales and actual sales can lead to under-/over-collections of authorized revenue that SDG&E proposes to collect through the EIA fixed charge component in the following year. The EIABA would track any under-/over-collections resulting from the EIA rate component. A two-way balancing account is appropriate because this rate component does not collect any incremental revenue or a new revenue request: this rate component simply transfers the collection of revenue from \$/kWh volumetric charges to a fixed charge. Therefore, any under-/over-collections that occur would result from previously authorized revenue requirements and would need to be either returned to or collected from customers.

1 **B. Recovery of the EIABA**

2 SDG&E proposes that the balance in the EIABA be recovered from the residential
3 customer class only. The EIA charge revenue requirement would be adjusted annually to include
4 the EIABA under-/over-collection from the previous year. As discussed above, the \$/kWh
5 volumetric rate credit would stay at the level set in this proceeding until the next GRC Phase 2.
6 SDG&E proposes that the disposition of the revenue under-/over-collection associated with
7 EIABA be included in SDG&E’s Annual Electric Regulatory Account Update and Preliminary
8 Electric Rates Outlook filing, which is filed as a Tier 2 advice letter in November every year
9 (effective upon CPUC Energy Division approval).

10 **C. Interaction With the Calibration Mechanism**

11 As discussed in the Joint IOU Cost Recovery Testimony, the Joint IOUs are proposing an
12 IGFC Balancing Account or “IGFCBA” Calibration Mechanism in the event of any large
13 revenue undercollections or overcollection. In the event a Calibration Mechanism event
14 occurred, and SDG&E pursued Option 1 as described in the Joint IOU Cost Recovery
15 Testimony, SDG&E would update the EIA fixed charge accordingly. This would prevent rate
16 shocks in the following year’s EIA charge. If no Calibration Mechanism event occurs, SDG&E
17 would maintain the EIA fixed charge (with the exception of annual adjustments for under-/over-
18 collections and sales forecast updates) and volumetric credit until its next GRC Phase 2.

19 **IV. CONCLUSION AND SUMMARY**

20 This concludes my prepared opening testimony.

1 **V. WITNESS QUALIFICATIONS**

2 My name is Gwendolyn Morien. My business address is 8330 Century Park Court, San
3 Diego, California 92123. I have been employed as the Rate Strategy and Design Manager in the
4 Customer Pricing Department at San Diego Gas & Electric Company since 2021. My primary
5 responsibilities include the development of electric rate design and policy in various regulatory
6 filings. I began work at SDG&E in 2016 and have held positions of increasing responsibility in
7 the Customer Pricing group.

8 I received a Bachelor of Science in Accounting from the State University of New York at
9 Geneseo in 2010 and a Master of International Affairs with a concentration in Environmental and
10 Energy Policy from the School of Global Policy and Strategy at the University of California, San
11 Diego in 2016. I am a licensed CPA (inactive) in New York.

12 I have previously testified before the California Public Utilities Commission and the
13 Federal Energy Regulatory Commission.