


DOCKETED	
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Project Title:	Local Ordinance Applications Exceeding the 2022 Energy Code
TN #:	258485
Document Title:	Statewide Reach Codes Program Comments - City of San Rafael Local Ordinance Application Cost Effectiveness
Description:	Report Appendix (Existing Single Family)
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*Comment Received From: Statewide Reach Codes Program
Submitted On: 8/13/2024
Docket Number: 22-BSTD-07*

City of San Rafael Local Ordinance Application Cost Effectiveness Report Appendix (Existing Single Family)

Appendix documenting utility tariff data used in the cost-effectiveness calculations for Existing Single Family Buildings.

Additional submitted attachment is included below.



2022 Cost-Effectiveness Study: Existing Single Family Building Upgrades

Prepared by:

Ada Shen, Alea German, Rebecca Evans, & Marc Hoeschele, Frontier Energy, Inc
Misti Bruceri, Misti Bruceri & Associates, LLC

Prepared for:

Kelly Cunningham, Codes and Standards Program, Pacific Gas and Electric

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Acronym List

2023 PV\$ – Present value costs in 2023

ACH50 – Air Changes per Hour at 50 pascals pressure differential

ACM – Alternative Calculation Method

ADU – Accessory Dwelling Unit

AFUE – Annual Fuel Utilization Efficiency

B/C – Lifecycle Benefit-to-Cost Ratio

BEopt – Building Energy Optimization Tool

BSC – Building Standards Commission

CA IOUs – California Investor-Owned Utilities

CASE – Codes and Standards Enhancement

CBEECC-Res – Computer program developed by the California Energy Commission for use in demonstrating compliance with the California Residential Building Energy Efficiency Standards

CEER – Combined Energy Efficiency Rating

CFI – California Flexible Installation

CFM – Cubic Feet per Minute

CO₂ – Carbon Dioxide

CPAU – City of Palo Alto Utilities

CPUC – California Public Utilities Commission

CZ – California Climate Zone

DFHP – Dual Fuel Heat Pump

DHW – Domestic Hot Water

DOE – Department of Energy

DWHR – Drain Water Heat Recovery

EDR – Energy Design Rating

EER – Energy Efficiency Ratio

EF – Energy Factor



6 Appendices

6.1 Map of California Climate Zones

Climate zone geographical boundaries are depicted in Figure 16. The map in Figure 16 along with a zip-code search directory is available at: https://ww2.energy.ca.gov/maps/renewable/building_climate_zones.html

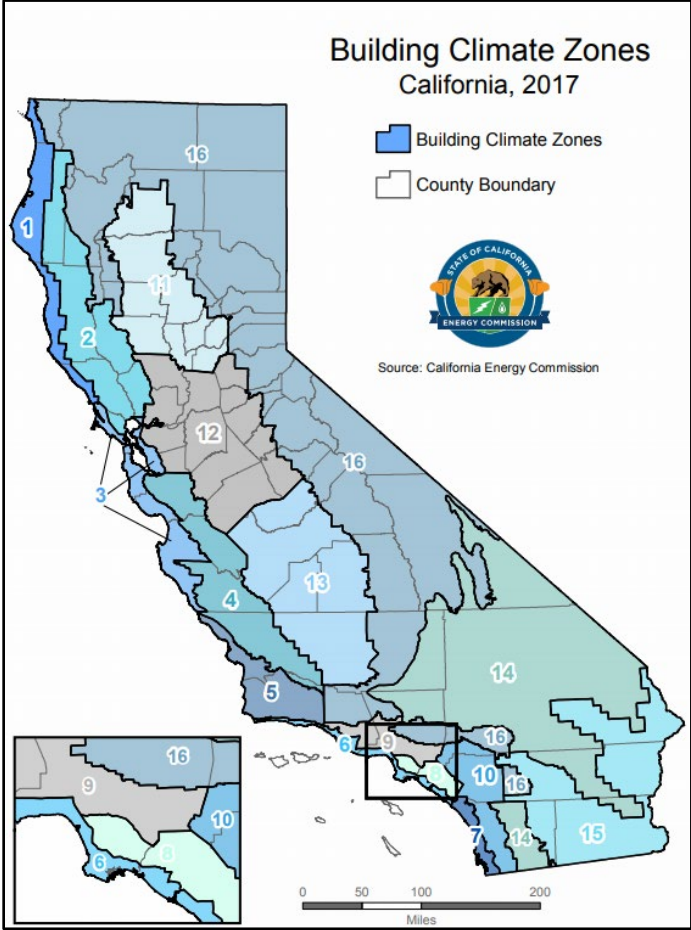


Figure 16. Map of California climate zones.

6.2 Utility Rate Schedules

The Reach Codes Team used the CA IOU and POU rate tariffs detailed below to determine the On-Bill savings for each package. The California Climate Credit was applied for both electricity and natural gas service for the IOUs using the 2023 credits shows below.²⁶ The credits were applied to reduce the total calculated annual bill, including any fixed fees or minimum bill amounts.

2023 Electric California Climate Credit Schedule

	February or March	April	May	June	July	Aug	Sept	Oct
PG&E	\$38.39							\$38.39
SCE	\$71.00							\$71.00
SDG&E	\$60.70							\$60.70

Residential Natural Gas California Climate Credit

In 2023, the 2023 Natural Gas California Climate Credit will be distributed in February or March instead of April.

	2018†	2019	2020	2021	2022	2023	Total Value Received Per Household 2018-2023
PG&E	\$30	\$25	\$27	\$25	\$48	\$52.78	\$208
SDG&E	*	\$34	\$21	\$18	\$43	\$43.40	\$162
Southwest Gas	\$22	\$25	\$27	\$28	\$49	\$56.35	\$207
SoCalGas	*	\$50	\$26	\$22	\$44	\$50.77	\$194

Electricity rates reflect the most recently approved tariffs. Monthly gas rates were estimated based on recent gas rates (November 2023) and a curve to reflect how natural gas prices fluctuate with seasonal supply and demand. The seasonal curve was estimated from monthly residential tariffs between 2014 and 2023 (between 2017 and 2023 for CPAU). 12-month curves were created from monthly gas rates for each of the ten years (Seven years for CPAU). These annual curves were then averaged to arrive at an average normalized annual curve. This was conducted separately for baseline and excess energy rates. Costs used in this analysis were then derived by establishing the most recent baseline and excess rate from the latest tariff as a reference point (November 2023), and then using the normalized curve to estimate the cost for the remaining months relative to the reference point rate.

²⁶ <https://www.cpuc.ca.gov/industries-and-topics/natural-gas/greenhouse-gas-cap-and-trade-program/california-climate-credit>

6.2.1 Pacific Gas & Electric

The following pages provide details on the PG&E electricity and natural gas tariffs applied in this study. Table 20 describes the baseline territories that were assumed for each climate zone. A net surplus compensation rate of \$0.07051/ kWh was applied to any net annual electricity generation based on a one-year average of the rates between December 2022 and November 2023.

Table 20. PG&E Baseline Territory by Climate Zone

Climate Zone	Baseline Territory
CZ01	V
CZ02	X
CZ03	T
CZ04	X
CZ05	T
CZ11	R
CZ12	S
CZ13	R
CZ16	Y

The PG&E monthly gas rate in \$/therm was applied on a monthly basis according to the rates shown in Table 21. These rates are based on applying a normalization curve to the November 2023 tariff based on ten years of historical gas data. Corresponding CARE rates reflect the 20 percent discount per the GL-1 tariff.

Table 21. PG&E Monthly Gas Rate (\$/therm)

Month	Total Charge	
	Baseline	Excess
January	\$2.05	\$2.43
February	\$2.08	\$2.46
March	\$1.92	\$2.31
April	\$1.80	\$2.20
May	\$1.77	\$2.18
June	\$1.78	\$2.18
July	\$1.80	\$2.20
August	\$1.85	\$2.26
September	\$1.92	\$2.33
October	\$1.99	\$2.40
November	\$2.06	\$2.46
December	\$2.05	\$2.44

Residential GAS Baseline Territories and Quantities ^{1/}

Effective April 1, 2022 - Present

BASELINE QUANTITIES (Therms Per Day Per Dwelling Unit)

Individually Metered			
Baseline Territories	Summer (April-October) <u>Effective Apr. 1, 2022</u>	Winter Off-Peak (Nov, Feb, Mar) <u>Effective Nov. 1, 2022</u>	Winter On-Peak (Dec, Jan) <u>Effective Dec. 1, 2022</u>
P	0.39	1.88	2.19
Q	0.56	1.48	2.00
R	0.36	1.24	1.81
S	0.39	1.38	1.94
T	0.56	1.31	1.68
V	0.59	1.51	1.71
W	0.39	1.14	1.68
X	0.49	1.48	2.00
Y	0.72	2.22	2.58

Master Metered			
Baseline Territories	Summer (April-October) <u>Effective Apr. 1, 2022</u>	Winter Off-Peak (Nov, Feb, Mar) <u>Effective Nov. 1, 2022</u>	Winter On-Peak (Dec, Jan) <u>Effective Dec. 1, 2022</u>
P	0.29	1.01	1.13
Q	0.56	0.67	0.77
R	0.33	0.87	1.16
S	0.29	0.61	0.65
T	0.56	1.01	1.10
V	0.59	1.28	1.32
W	0.26	0.71	0.87
X	0.33	0.67	0.77
Y	0.52	1.01	1.13

Summer Season: Apr-Oct
Winter Off-Peak: Nov, Feb, Mar
Winter On-Peak: Dec, Jan

Advice Letter: 4589-G
 Decision 21-11-016
 GRC 2020 Ph II [Application 19-11-019]
 Filed: Nov 22, 2019



ELECTRIC SCHEDULE E-TOU-C
RESIDENTIAL TIME-OF-USE (PEAK PRICING 4 - 9 p.m. EVERY DAY)

Sheet 2

RATES:
(Cont'd.)

E-TOU-C TOTAL BUNDLED RATES

Total Energy Rates (\$ per kWh)	PEAK		OFF-PEAK	
<i>Summer</i>				
Total Usage	\$0.53933	(I)	\$0.45589	(I)
Baseline Credit (Applied to Baseline Usage Only)	(\$0.08851)	(R)	(\$0.08851)	(R)
<i>Winter</i>				
Total Usage	\$0.43662	(I)	\$0.40827	(I)
Baseline Credit (Applied to Baseline Usage Only)	(\$0.08851)	(R)	(\$0.08851)	(R)
Delivery Minimum Bill Amount (\$ per meter per day)	\$0.37612			
California Climate Credit (per household, per semi-annual payment occurring in the March* and October bill cycles)	(\$38.39)			

Total bundled service charges shown on customer's bills are unbundled according to the component rates shown below. Where the delivery minimum bill amount applies, the customer's bill will equal the sum of (1) the delivery minimum bill amount plus (2) for bundled service, the generation rate times the number of kWh used. For revenue accounting purposes, the revenues from the delivery minimum bill amount will be assigned to the Transmission, Transmission Rate Adjustments, Reliability Services, Public Purpose Programs, Nuclear Decommissioning, Competition Transition Charges, Energy Cost Recovery Amount, Wildfire Fund Charge, and New System Generation Charges based on kWh usage times the corresponding unbundled rate component per kWh, with any residual revenue assigned to Distribution.

* Pursuant to D.23-02-014, disbursement of the April 2023 residential Climate Credit shall begin by March 1, 2023.

(Continued)

Advice Decision	7009-E	Issued by Meredith Allen Vice President, Regulatory Affairs	Submitted Effective Resolution	<u>August 25, 2023</u> <u>September 1, 2023</u>
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ELECTRIC SCHEDULE E-TOU-C Sheet 3
RESIDENTIAL TIME-OF-USE (PEAK PRICING 4 - 9 p.m. EVERY DAY)

RATES:
(Cont'd.)

UNBUNDLING OF E-TOU-C TOTAL RATES

Energy Rates by Component (\$ per kWh)	PEAK		OFF-PEAK	
Generation:				
Summer (all usage)	\$0.19776		\$0.13432	
Winter (all usage)	\$0.14916		\$0.12413	
Distribution**:				
Summer (all usage)	\$0.17029	(I)	\$0.15029	(I)
Winter (all usage)	\$0.11618	(I)	\$0.11286	(I)
Conservation Incentive Adjustment (Baseline Usage)			(\$0.02216)	(I)
Conservation Incentive Adjustment (Over Baseline Usage)			\$0.06635	(I)
Transmission* (all usage)			\$0.05254	
Transmission Rate Adjustments* (all usage)			\$0.00059	
Reliability Services* (all usage)			\$0.00069	
Public Purpose Programs (all usage)			\$0.02578	
Nuclear Decommissioning (all usage)			\$0.00135	
Competition Transition Charges (all usage)			\$0.00030	
Energy Cost Recovery Amount (all usage)			(\$0.00071)	
Wildfire Fund Charge (all usage)			\$0.00530	
New System Generation Charge (all usage)**			\$0.00346	
Wildfire Hardening Charge (all usage)			\$0.00254	
Recovery Bond Charge (all usage)			\$0.00528	(R)
Recovery Bond Credit (all usage)			(\$0.00528)	(I)
Bundled Power Charge Indifference Adjustment (all usage)***			\$0.01309	

* Transmission, Transmission Rate Adjustments and Reliability Service charges are combined for presentation on customer bills.
 ** Distribution and New System Generation Charges are combined for presentation on customer bills.
 *** Direct Access, Community Choice Aggregation and Transitional Bundled Service Customers pay the applicable Vintaged Power Charge Indifference Adjustment. Generation and Bundled PCIA are combined for presentation on bundled customer bills.

(Continued)

Advice	7009-E	Issued by	Submitted	<u>August 25, 2023</u>
Decision		Meredith Allen	Effective	<u>September 1, 2023</u>
		Vice President, Regulatory Affairs	Resolution	



ELECTRIC SCHEDULE E-ELEC Sheet 2
 RESIDENTIAL TIME-OF-USE (ELECTRIC HOME)
 SERVICE FOR CUSTOMERS WITH QUALIFYING ELECTRIC TECHNOLOGIES

RATES:(Cont'd.)

TOTAL BUNDLED RATES

Base Services Charge (\$ per meter per day)	\$0.49281			
Total Energy Rates (\$ per kWh)		<u>PEAK</u>	<u>PART-PEAK</u>	<u>OFF-PEAK</u>
Summer Usage		\$0.56589 (I)	\$0.40401 (I)	\$0.34733 (I)
Winter Usage		\$0.33438 (I)	\$0.31229 (I)	\$0.29843 (I)
California Climate Credit (per household, per semi-annual payment occurring in the March† and October bill cycles)	(\$38.39)			

Total bundled service charges shown on a customer's bills are unbundled according to the component rates shown below.

UNBUNDLING OF TOTAL RATES

Energy Rates by Component (\$ per kWh)	<u>PEAK</u>		<u>PART-PEAK</u>		<u>OFF-PEAK</u>
Generation:					
Summer Usage	\$0.28164		\$0.18253		\$0.13743
Winter Usage	\$0.11951		\$0.09954		\$0.08619
Distribution**:					
Summer Usage	\$0.17932 (I)		\$0.11655 (I)		\$0.10497 (I)
Winter Usage	\$0.10994 (I)		\$0.10782 (I)		\$0.10731 (I)
Transmission* (all usage)	\$0.05254		\$0.05254		\$0.05254
Transmission Rate Adjustments* (all usage)	\$0.00059		\$0.00059		\$0.00059
Reliability Services* (all usage)	\$0.00069		\$0.00069		\$0.00069
Public Purpose Programs (all usage)	\$0.02578		\$0.02578		\$0.02578
Nuclear Decommissioning (all usage)	\$0.00135		\$0.00135		\$0.00135
Competition Transition Charges (all usage)	\$0.00030		\$0.00030		\$0.00030
Energy Cost Recovery Amount (all usage)	(\$0.00071)		(\$0.00071)		(\$0.00071)
Wildfire Fund Charge (all usage)	\$0.00530		\$0.00530		\$0.00530
New System Generation Charge (all usage)**	\$0.00346		\$0.00346		\$0.00346
Wildfire Hardening Charge (all usage)	\$0.00254		\$0.00254		\$0.00254
Recovery Bond Charge (all usage)	\$0.00528 (R)		\$0.00528 (R)		\$0.00528 (R)
Recovery Bond Credit (all usage)	(\$0.00528) (I)		(\$0.00528) (I)		(\$0.00528) (I)
Bundled Power Charge Indifference Adjustment (all usage)***	\$0.01309		\$0.01309		\$0.01309

* Transmission, Transmission Rate Adjustments and Reliability Service charges are combined for presentation on customer bills.
 ** Distribution and New System Generation Charges are combined for presentation on customer bills.
 *** Direct Access, Community Choice Aggregation and Transitional Bundled Service Customers pay the applicable Vintaged Power Charge Indifference Adjustment. Generation and Bundled PCIA are combined for presentation on bundled customer bills.
 † Pursuant to D.23-02-014, disbursement of the April 2023 residential Climate Credit shall begin by March 1, 2023.

(Continued)

Advice	7009-E	Issued by	Submitted	<u>August 25, 2023</u>
Decision		Meredith Allen	Effective	<u>September 1, 2023</u>
		Vice President, Regulatory Affairs	Resolution	



ELECTRIC SCHEDULE E-ELEC Sheet 3 (N)
RESIDENTIAL TIME-OF-USE (ELECTRIC HOME) (N)
SERVICE FOR CUSTOMERS WITH QUALIFYING ELECTRIC TECHNOLOGIES

- SPECIAL CONDITIONS:
1. TIME PERIODS: Times of the year and times of the day are defined as follows: (N)
 - All Year:
 - Peak: 4:00 p.m. to 9:00 p.m. every day including weekends and holidays.
 - Partial-Peak: 3:00 p.m. to 4:00 p.m. and 9:00 p.m. to 12:00 a.m. every day including weekends and holidays.
 - Off-Peak: All other hours.
 2. SEASONAL CHANGES: The summer season is June 1 through September 30 and the winter season is October 1 through May 31. When billing includes use in both the summer and winter periods, charges will be prorated based upon the number of days in each period.
 3. ADDITIONAL METERS: If a residential dwelling unit is served by more than one electric meter, the customer must designate which meter is the primary meter and which is (are) the additional meter(s).
 4. BILLING: A customer's bill is calculated based on the option applicable to the customer.
- Bundled Service Customers** receive generation and delivery services solely from PG&E. The customer's bill is based on the Unbundling of Total Rates set forth above.
- Transitional Bundled Service (TBS) Customers** take TBS as prescribed in Rules 22.1 and 23.1, or take PG&E bundled service prior to the end of the six (6) month advance notice period required to elect PG&E bundled service as prescribed in Rules 22.1 and 23.1. TBS customers shall pay all charges shown in the Unbundling of Total Rates except for the Bundled Power Charge Indifference Adjustment and the generation charge. TBS customers shall also pay for their applicable Vintaged Power Charge Indifference Adjustment provided in the table below, and the short-term commodity prices as set forth in Schedule TBCC. (N)

(Continued)

<i>Advice</i>	6768-E		<i>Submitted</i>	<u>November 18, 2022</u>
<i>Decision</i>	D.21-11-016	<i>Issued by</i> Meredith Allen	<i>Effective</i>	<u>December 1, 2022</u>
		<i>Vice President, Regulatory Affairs</i>	<i>Resolution</i>	



ELECTRIC SCHEDULE D-CARE Sheet 1
 LINE-ITEM DISCOUNT FOR CALIFORNIA ALTERNATE RATES FOR ENERGY (CARE)
 CUSTOMERS

APPLICABILITY: This schedule is applicable to single-phase and polyphase residential service in single-family dwellings and in flats and apartments separately metered by PG&E and domestic submetered tenants residing in multifamily accommodations, mobilehome parks and to qualifying recreational vehicle parks and marinas and to farm service on the premises operated by the person whose residence is supplied through the same meter, where the applicant qualifies for California Alternate Rates for Energy (CARE) under the eligibility and certification criteria set forth in Electric Rule 19.1. CARE service is available on Schedules E-1, E-8, E-TOU-B, E-TOU-C, E-TOU-D, EV2, E-ELEC, EM, ES, ESR, ET and EM-TOU. (T)

TERRITORY: This rate schedule applies everywhere PG&E provides electric service.

RATES: Customers taking service on this rate schedule whose otherwise applicable rate schedule has no Delivery Minimum Bill Amount (Schedule E-ELEC) will receive a CARE percentage discount of 35.000% on their total bundled charges (except for the California Climate Credit, which will not be discounted). Customers taking service on this rate schedule whose otherwise applicable rate schedule has a Delivery Minimum Bill Amount (all other schedules) will receive a CARE percentage discount ("A" or "C" below) on their total bundled charges on their otherwise applicable rate schedule (except for the California Climate Credit, which will not be discounted) and also will receive a percentage discount ("B" or "D" below) on the delivery minimum bill amount, if applicable. The CARE discount will be calculated for direct access and community choice aggregation customers based on the total charges as if they were subject to bundled service rates. Discounts will be applied as a residual reduction to distribution charges, after D-CARE customers are exempted from the Wildfire Fund Charge, Recovery Bond Charge, Recovery Bond Credit, and the CARE surcharge portion of the public purpose program charge used to fund the CARE discount. These conditions also apply to master-metered customers and to qualified sub-metered tenants where the master-meter customer is jointly served under PG&E's Rate Schedule D-CARE and either Schedule EM, ES, ESR, ET, or EM-TOU. (N)
 |
 |
 (N)
 (T)
 |
 (T)
 (T)

For master-metered customers where one or more of the submetered tenants qualifies for CARE rates under the eligibility and certification criteria set forth in Rule 19.1, 19.2, or 19.3, the CARE discount is equal to a percentage ("C" below) of the total bundled charges, multiplied by the number of CARE units divided by the total number of units. In addition, master-metered customers eligible for D-CARE will receive a percentage discount ("D" below) on the delivery minimum bill amount, if applicable.

It is the responsibility of the master-metered customer to advise PG&E within 15 days following any change in the number of dwelling units and/or any decrease in the number of qualifying CARE applicants that results when such applicants move out of their submetered or non-submetered dwelling unit, or submetered permanent-residence RV or permanent-residence boat.

(L)
 |
 (L)

(Continued)

6.2.2 Southern California Edison

The following pages provide details on the SCE electricity tariffs applied in this study. Table 22 describes the baseline territories that were assumed for each climate zone. A net surplus compensation rate of \$ 0.06030/ kWh was applied to any net annual electricity generation based on a one-year average of the rates between December 2022 and November 2023

Table 22: SCE Baseline Territory by Climate Zone

Climate Zone	Baseline Territory
CZ06	6
CZ08	8
CZ09	9
CZ10	10
CZ14	14
CZ15	15

Schedule TOU-D
TIME-OF-USE
DOMESTIC
 (Continued)

Sheet 12 (T)

SPECIAL CONDITIONS

1. Applicable rate time periods are defined as follows:

Option 4-9 PM, Option 4-9 PM-CPP, Option PRIME, Option PRIME-CPP :

(T)

TOU Period	Weekdays		Weekends and Holidays	
	Summer	Winter	Summer	Winter
On-Peak	4 p.m. - 9 p.m.	N/A	N/A	N/A
Mid-Peak	N/A	4 p.m. - 9 p.m.	4 p.m. - 9 p.m.	4 p.m. - 9 p.m.
Off-Peak	All other hours	9 p.m. - 8 a.m.	All other hours	9 p.m. - 8 a.m.
Super-Off-Peak	N/A	8 a.m. - 4 p.m.	N/A	8 a.m. - 4 p.m.
CPP Event Period	4 p.m. - 9 p.m.	4 p.m. - 9 p.m.	N/A	N/A



Southern California Edison
Rosemead, California (U 338-E)

Revised Cal. PUC Sheet No. 85111-E
Cancelling Revised Cal. PUC Sheet No. 74502-E

Schedule TOU-D
TIME-OF-USE
DOMESTIC
(Continued)

Sheet 2

RATES

Customers receiving service under this Schedule will be charged the applicable rates under Option 4-9 PM, Option 4-9 PM-CPP, Option 5-8 PM, Option 5-8 PM-CPP, Option PRIME, Option PRIME-CPP Option A, Option A-CPP, Option B, or Option B-CPP, as listed below. CPP Event Charges will apply to all energy usage during CPP Event Energy Charge periods and CPP Non-Event Energy Credits will apply as a reduction on CPP Non-Event Energy Credit Periods during Summer Season days, 4:00 p.m. to 9:00 p.m., as described in Special Conditions 1 and 3, below:

	Delivery Service Total ¹	Generation ²	
		UG ³	DWREC ⁴
Option 4-9 PM / Option 4-9 PM-CPP			
Energy Charge - \$/kWh			
Summer Season - On-Peak	0.28829 (R)	0.28543 (I)	0.00000
Mid-Peak	0.28829 (R)	0.17707 (I)	0.00000
Off-Peak	0.24482 (R)	0.11382 (I)	0.00000
Winter Season - Mid-Peak	0.28829 (R)	0.21752 (I)	0.00000
Off-Peak	0.24482 (R)	0.13851 (I)	0.00000
Super-Off-Peak	0.22919 (R)	0.11890 (I)	0.00000
Baseline Credit ^{****} - \$/kWh	(0.09759) (I)	0.00000	
Fixed Recovery Charge - \$/kWh	0.00090 (R)		
Basic Charge - \$/day			
Single-Family Residence	0.031		
Multi-Family Residence	0.024		
Minimum Charge ^{**} - \$/day			
Single Family Residence	0.346		
Multi-Family Residence	0.346		
Minimum Charge (Medical Baseline) ^{**} - \$/day			
Single Family Residence	0.173		
Multi-Family Residence	0.173		
California Climate Credits ¹⁰	(71.00) (I)		
California Alternate Rates for Energy Discount - %	100.00*		
Family Electric Rate Assistance Discou	100.00		
Option 4-9 PM-CPP			
CPP Event Energy Charge - \$/kWh		0.80000	
Summer CPP Non-Event Credit			
On-Peak Energy Credit - \$/kWh		(0.15170)	
Maximum Available Credit - \$/kWh ^{****}			
Summer Season		(0.67183) (R)	

* Represents 100% of the discount percentage as shown in the applicable Special Condition of this Schedule.
 ** The Minimum Charge is applicable when the Delivery Service Energy Charge, plus the applicable Basic Charge is less than the Minimum Charge.
 *** The ongoing Competition Transition Charge CTC of (\$0.00003) per kWh is recovered in the UG component of Generation. (I)
 **** The Baseline Credit applies up to 100% of the Baseline Allocation, regardless of Time-of-Use time period. Additional Baseline Allocations apply for Customers with Heat Pump Water Heaters served under this Option. The Baseline Allocations are set forth in Preliminary Statement, Part H.
 *****The Maximum Available Credit is the capped credit amount for CPP Customers dual participating in other demand response programs.
 1 Total = Total Delivery Service rates are applicable to Bundled Service, Direct Access (DA) and Community Choice Aggregation Service (CCA Service) Customers, except DA and CCA Service Customers are not subject to the DWRBC rate component of this Schedule but instead pay the DWRBC as provided by Schedule DA-CRS or Schedule CCA-CRS.
 2 Generation = The Gen rates are applicable only to Bundled Service Customers. See Special Condition below for PCIA recovery.
 3 DWREC = Department of Water Resources (DWR) Energy Credit – For more information on the DWR Energy Credit, see the Billing Calculation Special Condition of this Schedule.
 4 Applied on an equal basis, per household, semi-annually. See the Special Conditions of this Schedule for more information.

(Continued)

(To be inserted by utility)

Advice 4929-E
Decision _____

2H13

Issued by
Michael Backstrom
Vice President

(To be inserted by Cal. PUC)

Date Submitted Dec 28, 2022
Effective Jan 1, 2023
Resolution E-5217



Schedule TOU-D
TIME-OF-USE
DOMESTIC
(Continued)

Sheet 6

RATES (Continued)

Option PRIME / Option PRIME-CPP	Delivery Service Total ¹	Generation ²	
		UG ^{**}	DWREC ³
Energy Charge - \$/kWh/Meter/Day			
Summer Season			
On-Peak	0.22789 (I)	0.42769 (I)	0.00000
Mid-Peak	0.22789 (I)	0.15221 (I)	0.00000
Off-Peak	0.15191 (I)	0.10182 (I)	0.00000
Winter Season			
Mid-Peak	0.23353 (I)	0.36028 (I)	0.00000
Off-Peak	0.14530 (I)	0.08630 (I)	0.00000
Super-Off-Peak	0.14530 (I)	0.08630 (I)	0.00000
Fixed Recovery Charge - \$/kWh	0.00280 (I)		
Basic Charge - \$/Meter/Day	0.427 (I)		
EV Meter Credit (Separately Metered E	(0.323) (N)		
EV Submeter Credit - \$/Meter/Day	(0.111) (R)		
California Climate Credit ¹⁰	(71.00)		
California Alternate Rates for Energy Discount - %	100.00*		
Family Electric Rate Assistance Discou	100.00		
Medical Line Item Discount - %	100.000		
Option PRIME-CPP			
CPP Event Energy Charge - \$/kWh		0.80000	
Summer CPP Non-Event Credit			
On-Peak Energy Credit - \$/kWh		(0.15170)	
Maximum Available Credit - \$/kWh****			
Summer Season		(0.71812) (R)	

* Represents 100% of the discount percentage as shown in the applicable Special Condition of this Schedule.
 ** The ongoing Competition Transition Charge (CTC) of (\$0.00003) per kWh is recovered in the UG component of Generation.
 **** The Maximum Available Credit is the capped credit amount for CPP Customers dual participating in other demand response programs.
 1 Total = Total Delivery Service rates are applicable to Bundled Service, Direct Access (DA) and Community Choice Aggregation Service (CCA Service) Customers, except DA and CCA Service Customers are not subject to the DWRBC rate component of this Schedule but instead pay the DWRBC as provided by Schedule DA-CRS or Schedule CCA-CRS.
 2 Generation = The Gen rates are applicable only to Bundled Service Customers. See Special Condition below for PCIA recovery.
 3 DWREC = Department of Water Resources (DWR) Energy Credit – For more information on the DWR Energy Credit, see the Billing Calculation Special Condition of this Schedule.
 4 Applied on an equal basis, per household, semi-annually. See the Special Conditions of this Schedule for more information.

(Continued)

(To be inserted by utility)

Advice 5041-E _____
Decision _____

6/19

Issued by
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Vice President

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Date Submitted May 30, 2023 _____
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Schedule D-CARE
CALIFORNIA ALTERNATE RATES FOR ENERGY
DOMESTIC SERVICE

Sheet 1

APPLICABILITY

Applicable to domestic service to CARE households residing in a permanent Single-Family Accommodation or Multifamily Accommodation where the customer meets all the Special Conditions of this Schedule. Customers enrolled in the CARE program are not eligible for the Family Electric Rate Assistance (FERA) program.

Pursuant to Special Condition 12 herein, customers receiving service under this Schedule are eligible to receive the California Climate Credit as shown in the Rates section below.

TERRITORY

Within the entire territory served.

RATES

The applicable charges set forth in Schedule D shall apply to Customers served under this Schedule.

CARE Discount:

A 29.8 percent discount is applied to a CARE Customer's bill prior to the application of the Public Utilities Commission Reimbursement Fee (PUCRF) and any applicable user fees, taxes, and late payment charges. CARE Customers are required to pay the PUCRF and any applicable user fees, taxes, and late payment charges in full. In addition, CARE Customers are exempt from paying the CARE Surcharge of \$0.00888 per kWh and the Wildfire Fund Non-Bypassable Charge of \$0.00530 per kWh. (R) The 29.8 percent discount, in addition to these exemptions result in an average effective CARE Discount of 32.5 percent.

(Continued)

(To be inserted by utility)

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1H12 22-12-031

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6.2.3 Southern California Gas

Following are the SoCalGas natural gas tariffs applied in this study. Table 23 describes the baseline territories that were assumed for each climate zone.

Table 23. SoCalGas Baseline Territory by Climate Zone

Climate Zone	Baseline Territory
CZ05	2
CZ06	1
CZ08	1
CZ09	1
CZ10	1
CZ14	2
CZ15	1

The SoCalGas monthly gas rate in \$/therm was applied on a monthly basis according to the rates shown in Table 24. These rates are based on applying a normalization curve to the November 2023 tariff based on ten years of historical gas data. Long-term historical natural gas rate data was only available for SoCalGas' procurement charges.²⁷ The baseline and excess transmission charges were found to be consistent over the course of a year and applied for the entire year based on 2023 rates. CARE rates reflect the 20 percent discount per the GR tariff.

Table 24. SoCalGas Monthly Gas Rate (\$/therm)

Month	Procurement Charge	Transportation Charge		Total Charge	
		Baseline	Excess	Baseline	Excess
January	\$0.72	\$0.86	\$1.31	\$1.92	\$2.36
February	\$0.50	\$0.86	\$1.31	\$1.57	\$2.02
March	\$0.44	\$0.86	\$1.31	\$1.48	\$1.93
April	\$0.39	\$0.86	\$1.31	\$1.39	\$1.84
May	\$0.41	\$0.86	\$1.31	\$1.43	\$1.87
June	\$0.46	\$0.86	\$1.31	\$1.49	\$1.93
July	\$0.47	\$0.86	\$1.31	\$1.51	\$1.96
August	\$0.51	\$0.86	\$1.31	\$1.58	\$2.03
September	\$0.46	\$0.86	\$1.31	\$1.52	\$1.96
October	\$0.45	\$0.86	\$1.31	\$1.48	\$1.92
November	\$0.48	\$0.86	\$1.31	\$1.54	\$1.99
December	\$0.57	\$0.86	\$1.31	\$1.63	\$2.08

Southern California Gas Company									
Residential Rates									
Nov-23									
Customer Type	Commodity	Rate	Procurement Charge	Transportation Charge	New Rate Effective	New Rate Effective	Absolute Rate Change	% Change	
Rate Schedule	Charge	Type	¢/therm	¢/therm	11/1/2023	10/1/2023			
Residential Individually Metered									
Schedule No. GR	GR	Baseline	67.806	86.490	154.296	125.096	29.200	23.3%	
Res. Service	GR	Non Baseline	67.806	131.037	198.843	169.726	29.117	17.2%	
	GT-R	Baseline	00.000	86.490	86.490	87.038	-00.548	-0.6%	
	GT-R	Non Baseline	00.000	131.037	131.037	131.668	-00.631	-0.5%	

²⁷ The SoCalGas procurement and transmission charges were obtained from the following site: <https://www.socalgas.com/for-your-business/energy-market-services/gas-prices/RES2023.xlsx> (live.com)

6.2.4 San Diego Gas & Electric

Following are the SDG&E electricity and natural gas tariffs applied in this study. Table 25 describes the baseline territories that were assumed for each climate zone. A net surplus compensation rate of \$0.04542/ kWh was applied to any net annual electricity generation based on a one-year average of the rates between December 2022 and November 2023.

Table 25. SDG&E Baseline Territory by Climate Zone

Climate Zone	Baseline Territory
CZ07	Coastal
CZ10	Inland
CZ14	Mountain

The SDG&E monthly gas rate in \$/therm was applied on a monthly basis according to the rates shown in Table 26. These rates are based on applying a normalization curve to the November 2023 tariff based on ten years of historical gas data. CARE rates reflect the 20 percent discount per the G-CARE tariff.

Table 26. SDG&E Monthly Gas Rate (\$/therm)

Month	Total Charge	
	Baseline	Excess
January	\$2.34	\$2.63
February	\$2.28	\$2.57
March	\$2.21	\$2.51
April	\$2.14	\$2.45
May	\$2.18	\$2.48
June	\$2.23	\$2.55
July	\$2.26	\$2.57
August	\$2.32	\$2.62
September	\$2.26	\$2.59
October	\$2.21	\$2.55
November	\$2.24	\$2.57
December	\$2.38	\$2.70

Baseline Usage: The following quantities of gas used in individually metered residences are to be billed at the baseline rates:

<u>All Customers:</u>	<u>Daily Therm Allowance</u>
Summer (May to Oct)	0.359
Winter On-Peak (Dec, Jan & Feb)	1.233
Winter Off-Peak (Nov, Mar, & Apr)	0.692



San Diego Gas & Electric Company
San Diego, California

Revised Cal. P.U.C. Sheet No. 37022-E

Canceling Revised Cal. P.U.C. Sheet No. 36337-E

SCHEDULE TOU-DR1
RESIDENTIAL TIME-OF-USE

Sheet 2

RATES

Total Rates:

Description – TOU DR1	UDC Total Rate	DWR BC + WF-NBC	EECC Rate + DWR Credit	Total Rate
Summer:				
On-Peak	0.25752	R 0.00530	I 0.57043	I 0.83325
Off-Peak	0.25752	R 0.00530	I 0.25697	I 0.51979
Super Off-Peak	0.25752	R 0.00530	I 0.09233	I 0.35515
Winter:				
On-Peak	0.43809	I 0.00530	I 0.19307	I 0.63646
Off-Peak	0.43809	I 0.00530	I 0.10855	I 0.55194
Super Off-Peak	0.43809	I 0.00530	I 0.08402	I 0.52741
Summer Baseline Adjustment Credit up to 130% of Baseline	(0.11724)	R		(0.11724) R
Winter Baseline Adjustment Credit up to 130% of Baseline	(0.11724)	R		(0.11724) R
Minimum Bill (\$/day)	0.380	I		0.380 I

Description – TOU DR1-CARE	UDC Total Rate	DWR BC + WF-NBC	EECC Rate + DWR Credit	Total Rate	Total Effective Care Rate
Summer – CARE Rates:					
On-Peak	0.25682	R 0.00000	I 0.57043	I 0.82725	I 0.55366
Off-Peak	0.25682	R 0.00000	I 0.25697	I 0.51379	I 0.33965
Super Off-Peak	0.25682	R 0.00000	I 0.09233	I 0.34915	I 0.22725
Winter – CARE Rates:					
On-Peak	0.43739	I 0.00000	I 0.19307	I 0.63046	I 0.41930
Off-Peak	0.43739	I 0.00000	I 0.10855	I 0.54594	I 0.36160
Super Off-Peak	0.43739	I 0.00000	I 0.08402	I 0.52141	I 0.34485
Summer Baseline Adjustment Credit up to 130% of Baseline	(0.11724)	R		(0.11724) R	(0.08004) R
Winter Baseline Adjustment Credit up to 130% of Baseline	(0.11724)	R		(0.11724) R	(0.08004) R
Minimum Bill (\$/day)	0.190	I		0.190 I	0.190 I

Note:

- Total Rates consist of UDC, Schedule DWR-BC (Department of Water Resources Bond Charge), Schedule WF-NBC (CA Wildfire Fund charge) and Schedule EECC (Electric Energy Commodity Cost) rates, with the EECC rates reflecting a DWR Credit. EECC rates are applicable to bundled customers only. See Special Condition 16 for PCIA (Power Charge Indifference Adjustment) recovery.
- Total Rates presented are for customers that receive commodity supply and delivery service from Utility.
- DWR-BC and WF-NBC charges do not apply to CARE customers.
- As identified in the rates tables, customer bills will also include line-item summer and winter credits for usage up to 130% of baseline to provide the rate capping benefits adopted by Assembly Bill 1X and Senate Bill 695.
- WF-NBC rate is 0.00530 + DWR-BC Bond Charge is 0.00000 .

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Decision No.

Issued by
Dan Skopec
Senior Vice President
Regulatory Affairs

Submitted Dec 30, 2022

Effective Jan 1, 2023

Resolution No. E-5217

Time Periods

All time periods listed are applicable to local time. The definition of time will be based upon the date service is rendered.

TOU Periods – Weekdays	Summer	Winter
On-Peak	4:00 p.m. – 9:00 p.m.	4:00 p.m. – 9:00 p.m.
Off-Peak	6:00 a.m. – 4:00 p.m.; 9:00 p.m. - midnight	6:00 a.m. – 4:00 p.m. Excluding 10:00 a.m. – 2:00 p.m. in March and April; 9:00 p.m. - midnight
Super Off-Peak	Midnight – 6:00 a.m.	Midnight – 6:00 a.m. 10:00 a.m. – 2:00 p.m. in March and April
TOU Period – Weekends and Holidays	Summer	Winter
On-Peak	4:00 p.m. – 9:00 p.m.	4:00 p.m. – 9:00 p.m.
Off-Peak	2:00 p.m. – 4:00 p.m.; 9:00 p.m. - midnight	2:00 p.m. – 4:00 p.m.; 9:00 p.m. - midnight
Super Off-Peak	Midnight – 2:00 p.m.	Midnight – 2:00 p.m.

Seasons: Summer June 1 – October 31
 Winter November 1 – May 31

15. **Baseline Usage:** The following quantities of electricity are used to calculate the baseline adjustment credit.

	Baseline Allowance For Climatic Zones*			
	Coastal	Inland	Mountain	Desert
Basic Allowance				
Summer (June 1 to October 31)	9.0	10.4	13.6	15.9
Winter (November 1 to May 31)	9.2	9.6	12.9	10.9
All Electric**				
Summer (June 1 to October 31)	6.0	8.7	15.2	17.0
Winter (November 1 to May 31)	8.8	12.2	22.1	17.1

* Climatic Zones are shown on the Territory Served, Map No. 1.

** All Electric allowances are available upon application to those customers who have permanently installed space heating or who have electric water heating and receive no energy from another source.



San Diego Gas & Electric Company
San Diego, California

Revised Cal. P.U.C. Sheet No. 37217-E

Canceling Revised Cal. P.U.C. Sheet No. 37016-E

SCHEDULE EV-TOU-5

Sheet 1

COST-BASED DOMESTIC TIME-OF-USE FOR HOUSEHOLDS WITH ELECTRIC VEHICLES

APPLICABILITY

Service under this schedule is specifically limited to customers who require service for charging of a currently registered Motor Vehicle, as defined by the California Motor Vehicle Code, which is: 1) a battery electric vehicle (BEV) or plug-in hybrid electric vehicle (PHEV) recharged via a recharging outlet at the customer's premises; or 2) a natural gas vehicle (NGV) refueled via a home refueling appliance (HRA) at the customer's premises. This schedule is not available to customers with a conventional charge sustaining (battery recharged solely from the vehicle's on-board generator) hybrid electric vehicle (HEV).

Residential customers taking service on Schedule NBT, who are required to utilize EV-TOU-5 as their otherwise applicable schedule (OAS) for electric service, do not require a qualifying motor vehicle, as described above to participate on Schedule EV-TOU-5.

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Customers on this schedule may also qualify for a semi-annual California Climate Credit \$(60.70) per Schedule GHG-ARR.

TERRITORY

Within the entire territory served by the utility.

RATES

Total Rates:

Description – EV-TOU-5 Rates	UDC Total Rate	DWR BC + WF-NBC	EECC Rate + DWR Credit	Total Rate
Basic Service Fee	16.00			16.00
Summer				
On-Peak	0.28032 I	0.00530 I	0.53067 I	0.81629 I
Off-Peak	0.28032 I	0.00530 I	0.19567 I	0.48129 I
Super Off-Peak	0.05588 I	0.00530 I	0.09233 I	0.15351 I
Winter				
On-Peak	0.28032 I	0.00530 I	0.22587 I	0.51149 I
Off-Peak	0.28032 I	0.00530 I	0.16213 I	0.44775 I
Super Off-Peak	0.05588 I	0.00530 I	0.08402 I	0.14520 I

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SCHEDULE EV-TOU-5

Sheet 4

COST-BASED DOMESTIC TIME-OF-USE FOR HOUSEHOLDS WITH ELECTRIC VEHICLES

Notes: Transmission Energy charges include the Transmission Revenue Balancing Account Adjustment (TRBAA) of \$(0.00242) per kWh and the Transmission Access Charge Balancing Account Adjustment (TACBAA) of \$(0.01631) per kWh. PPP Energy charges includes Low Income PPP rate (LI-PPP) \$0.01669/kWh, Non-low Income PPP rate (Non-LI-PPP) \$0.00333/kWh (pursuant to PU Code Section 399.8, the Non-LI-PPP rate may not exceed January 1, 2000 levels), Procurement Energy Efficiency Surcharge Rate of \$0.00422 /kWh, California Solar Initiative rate (CSI) of \$0.00000/kWh and Self-Generation Incentive Program rate (SGIP) \$0.00122/kWh. The basic service fee of \$16 per month is applied to a customer's bill and a 50% discount is applied for CARE, Medical Baseline, or Family Electric Rate Assistance Program (FERA) customers resulting in their basic service fees to be \$8 per month.

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Rate Components

The Utility Distribution Company Total Rates (UDC Total) shown above are comprised of the following components (if applicable): (1) Transmission (Trans) Charges, (2) Distribution (Distr) Charges, (3) Public Purpose Program (PPP) Charges, (4) Nuclear Decommissioning (ND) Charge, (5) Ongoing Competition Transition Charges (CTC), (6) Local Generation Charge (LGC), (7) Reliability Services (RS), and (8) the Total Rate Adjustment Component (TRAC).

Certain Direct Access customers are exempt from the TRAC, as defined in Rule 1 – Definitions.

Franchise Fee Differential

A Franchise Fee Differential of 5.78% will be applied to the monthly billings calculated under this schedule for all customers within the corporate limits of the City of San Diego. Such Franchise Fee Differential shall be so indicated and added as a separate item to bills rendered to such customers.

Time Periods:

All time periods listed are applicable to actual "clock" time)

TOU Period – Weekdays	Summer	Winter
On-Peak	4:00 p.m. – 9:00 p.m.	4:00 p.m. – 9:00 p.m.
Off-Peak	6:00 a.m. – 4:00 p.m.; 9:00 p.m. – midnight	6:00 a.m. – 4:00 p.m. Excluding 10:00 a.m.–2:00 p.m.in March and April; 9:00 p.m. - midnight
Super-Off-Peak	Midnight – 6:00 a.m.	Midnight – 6:00 a.m. 10:00 a.m. – 2:00 p.m. in March and April

TOU Period – Weekends and Holidays	Summer	Winter
On-Peak	4:00 p.m. – 9:00 p.m.	4:00 p.m. – 9:00 p.m.
Off-Peak	2:00 p.m. – 4:00 p.m.; 9:00 p.m. – midnight	2:00 p.m. – 4:00 p.m. 9:00 p.m. - midnight
Super-Off-Peak	Midnight – 2:00 p.m.	Midnight – 2:00 p.m.

Seasons:

Summer June 1 – October 31
Winter November 1 – May 31

(Continued)

4C8

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SCHEDULE TOU-ELEC

Sheet 1

DOMESTIC TIME-OF-USE FOR HOUSEHOLDS WITH ELECTRIC VEHICLES, ENERGY STORAGE,
OR ELECTRIC HEAT PUMPS

APPLICABILITY

Service under this schedule is available on a voluntary basis for all residential customers who meet one or more of the following criteria: 1) require service for charging of a currently registered Motor Vehicle, as defined by the California Motor Vehicle Code, which is: a) a battery electric vehicle (BEV) or plug-in hybrid electric vehicle (PHEV) recharged via a recharging outlet at the customer's premises; or b) a natural gas vehicle (NGV) refueled via a home refueling appliance (HRA) at the customer's premises; 2) have a behind-the-meter energy storage device that is interconnected through Electric Rule 21; or 3) have an electric heat pump for water heating or climate control. This schedule is not available to customers with a conventional charge sustaining (battery recharged solely from the vehicle's on-board generator) hybrid electric vehicle (HEV).

This schedule is also available to customers who meet the above criteria as well as qualify for the California Alternate Rates for Energy (CARE) Program as outlined in Schedule E-CARE, and/or Medical Baseline as outlined in Special Condition (SC) 5. The rates for CARE customers and/or Medical Baseline are identified in the rate tables below as TOU-ELEC-CARE and TOU-ELEC-MB rates, respectively.

There is a cap of 10,000 customers who may take service on this rate, as defined in SC 10.

Pursuant to D.22-11-022, customers that opt-in to schedule TOU-ELEC within its first year of being offered have the option to return to their previous rate schedule prior to the 12-month requirement. See SC4 Terms of Service for all requirements.

Customers on this schedule may also qualify for a semi-annual California Climate Credit \$(60.70) per Schedule GHG-ARR.

TERRITORY

Within the entire territory served by the utility.

RATES

Total Rates:

Description – TOU-ELEC Rates	UDC Total Rate	DWR BC + WF-NBC	EECC Rate	Total Rate
Monthly Service Fee	16.00			16.00
Summer				
On-Peak	0.22228	0.00530	0.51568	0.74326
Off-Peak	0.22228	0.00530	0.14644	0.37402
Super Off-Peak	0.22228	0.00530	0.09785	0.32543
Winter				
On-Peak	0.22228	0.00530	0.27460	0.50218
Off-Peak	0.22228	0.00530	0.13323	0.36081
Super Off-Peak	0.22228	0.00530	0.08905	0.31663

(Continued)

1H6

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San Diego, California

Original Cal. P.U.C. Sheet No. 37196-E

Canceling _____ Cal. P.U.C. Sheet No. _____

SCHEDULE TOU-ELEC

Sheet 2

**DOMESTIC TIME-OF-USE FOR HOUSEHOLDS WITH ELECTRIC VEHICLES, ENERGY STORAGE,
OR ELECTRIC HEAT PUMPS**

RATES (Continued)

Description – TOU-ELEC CARE Rates	UDC Total Rate	DWR BC + WF-NBC	EECC Rate	Total Rate	Total Effective CARE Rate
Monthly Service Fee	16.00			16.00	16.00
Summer – CARE Rates:					
On-Peak	0.22158	0.00000	0.51568	0.73726	0.49222
Off-Peak	0.22158	0.00000	0.14644	0.36802	0.24013
Super Off-Peak	0.22158	0.00000	0.09785	0.31943	0.20896
Winter – CARE Rates:					
On-Peak	0.22158	0.00000	0.27460	0.49618	0.32763
Off-Peak	0.22158	0.00000	0.13323	0.35481	0.23111
Super Off-Peak	0.22158	0.00000	0.08905	0.31063	0.20095

Description – TOU-ELEC MB Rates	UDC Total Rate	DWR BC + WF-NBC	EECC Rate	Total Rate	Total Effective MB Rate
Monthly Service Fee	16.00			16.00	16.00
Summer – MB Rates:					
On-Peak	0.22228	0.00000	0.51568	0.73796	0.59037
Off-Peak	0.22228	0.00000	0.14644	0.36872	0.29498
Super Off-Peak	0.22228	0.00000	0.09785	0.32013	0.25610
Winter – MB Rates:					
On-Peak	0.22228	0.00000	0.27460	0.49688	0.39750
Off-Peak	0.22228	0.00000	0.13323	0.35551	0.28441
Super Off-Peak	0.22228	0.00000	0.08905	0.31133	0.24906

Note:

- Total Rates consist of UDC, Schedule DWR-BC (Department of Water Resources Bond Charge), Schedule WF-NBC (CA Wildfire Fund charge) and Schedule EECC (Electric Energy Commodity Cost) rates. EECC rates are applicable to bundled customers only. See Special Condition 9 for PCIA (Power Charge Indifference Adjustment) recovery.
- Total Rates presented are for customers that receive commodity supply and delivery service from Utility. Differences in total rates paid by Direct Access (DA) and Community Choice Aggregation (CCA) customers are identified in Schedule DA-CRS and CCA-CRS, respectively.
- DWR-BC and WF-NBC charges do not apply to CARE or Medical Baseline customers.
- WF-NBC rate is 0.00530 + DWR-BC Bond Charge is 0.00000

2H5

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San Diego, California

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Canceling Cal. P.U.C. Sheet No.

SCHEDULE TOU-ELEC

Sheet 3

**DOMESTIC TIME-OF-USE FOR HOUSEHOLDS WITH ELECTRIC VEHICLES, ENERGY STORAGE,
OR ELECTRIC HEAT PUMPS**

RATES (CONTINUED)

UDC Rates

Description – TOU-ELEC	Transm	Distr	PPP	ND	CTC	LGC	RS	TRAC	UDC Total
Monthly Service Fee (\$/Mo)		16.00							16.00
Summer:									
On-Peak	0.07340	0.10796	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22228
Off-Peak	0.07340	0.10796	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22228
Super Off-Peak	0.07340	0.10796	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22228
Winter:									
On-Peak	0.07340	0.10796	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22228
Off-Peak	0.07340	0.10796	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22228
Super Off-Peak	0.07340	0.10796	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22228

Description – TOU-ELEC – CARE Rates	Transm	Distr	PPP	ND	CTC	LGC	RS	TRAC	UDC Total
Monthly Service Fee (\$/Mo)		16.00							16.00
Summer CARE Rates:									
On-Peak	0.07340	0.10726	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22158
Off-Peak	0.07340	0.10726	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22158
Super Off-Peak	0.07340	0.10726	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22158
Winter CARE Rates:									
On-Peak	0.07340	0.10726	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22158
Off-Peak	0.07340	0.10726	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22158
Super Off-Peak	0.07340	0.10726	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22158

Description – TOU-ELEC – MB Rates	Transm	Distr	PPP	ND	CTC	LGC	RS	TRAC	UDC Total
Monthly Service Fee (\$/Mo)		16.00							16.00
Summer – MB Rates									
On-Peak	0.07340	0.10796	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22228
Off-Peak	0.07340	0.10796	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22228
Super Off-Peak	0.07340	0.10796	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22228
Winter – MB Rates									
On-Peak	0.07340	0.10796	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22228
Off-Peak	0.07340	0.10796	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22228
Super Off-Peak	0.07340	0.10796	0.02546	0.00007	0.00153	0.01383	0.00003	0.00000	0.22228

(Continued)

3H11 Issued by Submitted Jan 31, 2023
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 Decision No. D.22-11-022 Resolution No.



San Diego Gas & Electric Company
San Diego, California

Original Cal. P.U.C. Sheet No. 37198-E

Canceling Cal. P.U.C. Sheet No. _____

SCHEDULE TOU-ELEC

Sheet 4

**DOMESTIC TIME-OF-USE FOR HOUSEHOLDS WITH ELECTRIC VEHICLES, ENERGY STORAGE,
OR ELECTRIC HEAT PUMPS**

Notes: Transmission Energy charges include the Transmission Revenue Balancing Account Adjustment (TRBAA) of \$(0.00242) per kWh and the Transmission Access Charge Balancing Account Adjustment (TACBAA) of \$(0.01631) per kWh. PPP Energy charges includes Low Income PPP rate (LI-PPP) \$0.01669/kWh, Non-low Income PPP rate (Non-LI-PPP) \$0.00333/kWh (pursuant to PU Code Section 399.8, the Non-LI-PPP rate may not exceed January 1, 2000 levels), Procurement Energy Efficiency Surcharge Rate of \$0.00422 /kWh, California Solar Initiative rate (CSI) of \$0.00000/kWh and Self-Generation Incentive Program rate (SGIP) \$0.00122/kWh.

Rate Components

The Utility Distribution Company Total Rates (UDC Total) shown above are comprised of the following components (if applicable): (1) Transmission (Trans) Charges, (2) Distribution (Distr) Charges, (3) Public Purpose Program (PPP) Charges, (4) Nuclear Decommissioning (ND) Charge, (5) Ongoing Competition Transition Charges (CTC), (6) Local Generation Charge (LGC), (7) Reliability Services (RS), and (8) the Total Rate Adjustment Component (TRAC).

Certain Direct Access customers are exempt from the TRAC, as defined in Rule 1 – Definitions.

Franchise Fee Differential

A Franchise Fee Differential of 5.78% will be applied to the monthly billings calculated under this schedule for all customers within the corporate limits of the City of San Diego. Such Franchise Fee Differential shall be so indicated and added as a separate item to bills rendered to such customers.

Time Periods:

All time periods listed are applicable to actual "clock" time)

TOU Period – Weekdays	Summer	Winter
On-Peak	4:00 p.m. – 9:00 p.m.	4:00 p.m. – 9:00 p.m.
Off-Peak	6:00 a.m. – 4:00 p.m.; 9:00 p.m. – midnight	6:00 a.m. – 4:00 p.m. Excluding 10:00 a.m.–2:00 p.m.in March and April; 9:00 p.m. - midnight
Super-Off-Peak	Midnight – 6:00 a.m.	Midnight – 6:00 a.m. 10:00 a.m. – 2:00 p.m. in March and April

TOU Period – Weekends and Holidays	Summer	Winter
On-Peak	4:00 p.m. – 9:00 p.m.	4:00 p.m. – 9:00 p.m.
Off-Peak	2:00 p.m. – 4:00 p.m.; 9:00 p.m. – midnight	2:00 p.m. – 4:00 p.m. 9:00 p.m. - midnight
Super-Off-Peak	Midnight – 2:00 p.m.	Midnight – 2:00 p.m.

Seasons:

Summer June 1 – October 31
Winter November 1 – May 31

(Continued)

4H7 Issued by _____ Submitted Jan 31, 2023
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San Diego Gas & Electric Company
San Diego, California

Revised Cal. P.U.C. Sheet No. 35718-E

Canceling Revised Cal. P.U.C. Sheet No. 32576-E

SCHEDULE E-CARE

Sheet 1

CALIFORNIA ALTERNATE RATES FOR ENERGY

APPLICABILITY

This schedule provides a California Alternate Rates for Energy (CARE) discount to each of the following types of customers listed below that meet the requirements for CARE eligibility as defined in Rule 1, Definitions, and herein, and is taken in conjunction with the customer's otherwise applicable service schedule.

- 1) Customers residing in a permanent single-family accommodation, separately metered by the Utility.
- 2) Multi-family dwelling units and mobile home parks supplied through one meter on a single premises where the individual unit is submetered.
- 3) Non-profit group living facilities.
- 4) Agricultural employee housing facilities.

TERRITORY

Within the entire territory served by the Utility.

DISCOUNT

- 1) **Residential CARE:** Qualified residential CARE customers will receive a total effective discount according to the following:

	2015	2016	2017	2018	2019	2020 and beyond
Effective Discount	40%	39%	38%	38%	36% R	35%

Pursuant to Commission Decision (D.) 15-07-001, the average effective CARE discount for residential customers will decrease 1% each year until an average effective discount of 35% is reached in 2020.

The average effective CARE discount consists of: (a) exemptions from paying the CARE Surcharge, Department of Water Resources Bond Charge (DWR-BC), Vehicle-Grid Integration (VGI) costs, and California Solar Initiative (CSI); (b) a 50% minimum bill relative to Non-CARE; (c) the California Wildfire Fund Charge (WF-NBC) and (d) a separate line-item bill discount for all qualified residential CARE customers with the exclusion of CARE Medical Baseline customers taking service on tiered rates schedules. D.15-07-001 retained the rate subsidies in Non-CARE Medical Baseline tiered rates and thereby a separate line-item discount is provided for these CARE Medical Baseline customers

(Continued)

1C5

Advice Ltr. No. 3928-E

Issued by
Dan Skopec
Vice President

Submitted Dec 30, 2021
Effective Jan 1, 2022

RESIDENTIAL ELECTRIC SERVICE

UTILITY RATE SCHEDULE E-1

A. APPLICABILITY:

This Rate Schedule applies to separately metered single-family residential dwellings receiving Electric Service from the City of Palo Alto Utilities.

B. TERRITORY:

This rate schedule applies everywhere the City of Palo Alto provides Electric Service.

C. UNBUNDLED RATES:

<u>Per kilowatt-hour (kWh)</u>	<u>Commodity</u>	<u>Distribution</u>	<u>Public Benefits</u>	<u>Total</u>
Tier 1 usage	\$ 0.09999	\$ 0.06954	\$ 0.00568	\$ 0.17521
Tier 2 usage Any usage over Tier 1	0.13873	0.10225	0.00568	0.24666
<u>Minimum Bill (\$/day)</u>				0.4181

D. SPECIAL NOTES:

1. Calculation of Cost Components

The actual bill amount is calculated based on the applicable rates in Section C above and adjusted for any applicable discounts, surcharges and/or taxes. On a Customer's bill statement, the bill amount may be broken down into appropriate components as calculated under Section C.

2. Calculation of Usage Tiers

Tier 1 Electricity usage shall be calculated and billed based upon a level of 11 kWh per day, prorated by Meter reading days of Service. As an example, for a 30-day bill, the Tier 1 level would be 330 kWh. For further discussion of bill calculation and proration, refer to Rule and Regulation 11.

{End}

CITY OF PALO ALTO UTILITIES

Issued by the City Council

Supersedes Sheet No E-1-1
dated 7-1-2022



CITY OF
PALO ALTO
UTILITIES

Sheet No **E-1-1**
Effective 7-1-2023

6.2.6 Sacramento Municipal Utilities District (Electric Only)

Following are the SMUD electricity tariffs applied in this study. The rates effective January 2023 were used.

Residential Time-of-Day Service Rate Schedule R-TOD

II. Firm Service Rates

A. Time-of-Day (5-8 p.m.) Rate

	Effective as of January 1, 2023	Effective as of January 1, 2024	Effective as of May 1, 2024	Effective as of January 1, 2025	Effective as of May 1, 2025
Time-of-Day (5-8 p.m.) Rate (RT02)					
Non-Summer Season (October - May)					
System Infrastructure Fixed Charge <i>per month per meter</i>	\$23.50	\$24.15	\$24.80	\$25.50	\$26.20
Electricity Usage Charge					
Peak \$/kWh	\$0.1547	\$0.1590	\$0.1633	\$0.1678	\$0.1724
Off-Peak \$/kWh	\$0.1120	\$0.1151	\$0.1183	\$0.1215	\$0.1248
Summer Season (June - September)					
System Infrastructure Fixed Charge <i>per month per meter</i>	\$23.50	\$24.15	\$24.80	\$25.50	\$26.20
Electricity Usage Charge					
Peak \$/kWh	\$0.3279	\$0.3369	\$0.3462	\$0.3557	\$0.3655
Mid-Peak \$/kWh	\$0.1864	\$0.1914	\$0.1967	\$0.2021	\$0.2077
Off-Peak \$/kWh	\$0.1350	\$0.1387	\$0.1425	\$0.1464	\$0.1505

B. Optional Critical Peak Pricing Rate

- The CPP Rate base prices per time-of-day period are the same as the prices per time-of-day period for TOD (5-8 p.m.).
- The CPP Rate provides a discount per kWh on the Mid-Peak and Off-Peak prices during summer months.
- During CPP Events, customers will be charged for energy used at the applicable time-of-day period rate plus the CPP Rate Event Price per kWh as shown on www.smud.org.
- During CPP Events, energy exported to the grid will be compensated at the CPP Rate Event Price per kWh as shown on www.smud.org.
- The CPP Rate Event Price and discount will be updated annually at SMUD's discretion and posted on www.smud.org.

C. Plug-In Electric Vehicle Credit (rate categories RT02 and RTC1)

This credit is for residential customers who have a licensed passenger battery electric plug-in or plug-in hybrid electric vehicle.

Credit applies to all electricity usage charges from midnight to 6:00 a.m. daily.

Electric Vehicle Credit..... **-\$0.0150/kWh**

III. Electricity Usage Surcharges

Refer to the following rate schedules for details on these surcharges.

A. Hydro Generation Adjustment (HGA). Refer to Rate Schedule HGA.

IV. Rate Option Menu

A. Energy Assistance Program Rate. Refer to Rate Schedule EAPR.

B. Medical Equipment Discount Program. Refer to Rate Schedule MED.

C. Joint Participation in Medical Equipment Discount and Energy Assistance Program Rate. Refer to Rate Schedule MED.

A. Time-of-Day (5-8 p.m.) Rate (rate category RT02)

1. The TOD (5-8 p.m.) Rate is the standard rate for SMUD’s residential customers. Eligible customers can elect the Fixed Rate under Rate Schedule R as an alternative rate.
2. The TOD (5-8 p.m.) Rate is an optional rate for customers who have an eligible renewable electrical generation facility under Rate Schedule NEM1 that was approved for installation by SMUD prior to January 1, 2018.
3. This rate has five kilowatt-hour (kWh) prices, depending on the time-of-day and season as shown below. Holidays are detailed in Section V. Conditions of Service.

Summer (Jun 1 - Sept 30)	Peak	Weekdays between 5:00 p.m. and 8:00 p.m.
	Mid-Peak	Weekdays between noon and midnight except during the Peak hours.
	Off-Peak	All other hours, including weekends and holidays ¹ .
Non-Summer (Oct 1 - May 31)	Peak	Weekdays between 5:00 p.m. and 8:00 p.m.
	Off-Peak	All other hours, including weekends and holidays ¹ .

¹ See Section V. Conditions of Service

6.2.7 Fuel Escalation Assumptions

The average annual escalation rates in Table 28 were used in this study. These are based on assumptions from the CPUC 2021 En Banc hearings on utility costs through 2030 (California Public Utilities Commission, 2021a). Escalation rates through the remainder of the 30-year evaluation period are based on the escalation rate assumptions within the 2022 TDV factors. No data was available to estimate electricity escalation rates for CPAU and SMUD, therefore electricity escalation rates for PG&E and statewide natural gas escalation rates were applied. Table 29 presents the average annual escalation rates used in the utility rate escalation sensitivity analysis shown in Section 3.2.4. Rates were applied for the same 30-year period and are based on the escalation rate assumptions within the 2025 LSC factors from 2027 through 2053.²⁸ These rates were developed for electricity use statewide (not utility-specific) and assume steep increases in gas rates in the latter half of the analysis period. Data was not available for the years 2024, 2025, and 2026 and so the CPUC En Banc assumptions were applied for those years using the average rate across the three IOUs for statewide electricity escalation.

Table 28: Real Utility Rate Escalation Rate Assumptions, CPUC En Banc and 2022 TDV Basis

	Statewide Natural Gas Residential Average Rate (%/year, real)	Electric Residential Average Rate (%/year, real)		
		PG&E	SCE	SDG&E
2024	4.6%	1.8%	1.6%	2.8%
2025	4.6%	1.8%	1.6%	2.8%
2026	4.6%	1.8%	1.6%	2.8%
2027	4.6%	1.8%	1.6%	2.8%
2028	4.6%	1.8%	1.6%	2.8%
2029	4.6%	1.8%	1.6%	2.8%
2030	4.6%	1.8%	1.6%	2.8%
2031	2.0%	0.6%	0.6%	0.6%
2032	2.4%	0.6%	0.6%	0.6%
2033	2.1%	0.6%	0.6%	0.6%
2034	1.9%	0.6%	0.6%	0.6%
2035	1.9%	0.6%	0.6%	0.6%
2036	1.8%	0.6%	0.6%	0.6%
2037	1.7%	0.6%	0.6%	0.6%
2038	1.6%	0.6%	0.6%	0.6%
2039	2.1%	0.6%	0.6%	0.6%
2040	1.6%	0.6%	0.6%	0.6%
2041	2.2%	0.6%	0.6%	0.6%
2042	2.2%	0.6%	0.6%	0.6%
2043	2.3%	0.6%	0.6%	0.6%
2044	2.4%	0.6%	0.6%	0.6%
2045	2.5%	0.6%	0.6%	0.6%
2046	1.5%	0.6%	0.6%	0.6%
2047	1.3%	0.6%	0.6%	0.6%
2048	1.6%	0.6%	0.6%	0.6%
2049	1.3%	0.6%	0.6%	0.6%
2050	1.5%	0.6%	0.6%	0.6%
2051	1.8%	0.6%	0.6%	0.6%
2052	1.8%	0.6%	0.6%	0.6%
2053	1.8%	0.6%	0.6%	0.6%

²⁸<https://www.energy.ca.gov/files/2025-energy-code-hourly-factors>. Actual escalation factors were provided by consultants E3.

Table 29: Real Utility Rate Escalation Rate Assumptions, 2025 LSC Basis

Year	Statewide Natural Gas Residential Average Rate (%/year, real)	Statewide Electricity Residential Average Rate (%/year, real)
2024	4.6%	2.1%
2025	4.6%	2.1%
2026	4.6%	2.1%
2027	4.2%	0.6%
2028	3.2%	1.9%
2029	3.6%	1.6%
2030	6.6%	1.3%
2031	6.7%	1.0%
2032	7.7%	1.2%
2033	8.2%	1.1%
2034	8.2%	1.1%
2035	8.2%	0.9%
2036	8.2%	1.1%
2037	8.2%	1.1%
2038	8.2%	1.0%
2039	8.2%	1.1%
2040	8.2%	1.1%
2041	8.2%	1.1%
2042	8.2%	1.1%
2043	8.2%	1.1%
2044	8.2%	1.1%
2045	8.2%	1.1%
2046	8.2%	1.1%
2047	3.1%	1.1%
2048	-0.5%	1.1%
2049	-0.6%	1.1%
2050	-0.5%	1.1%
2051	-0.6%	1.1%
2052	-0.6%	1.1%
2053	-0.6%	1.1%

Get In Touch

The adoption of reach codes can differentiate jurisdictions as efficiency leaders and help accelerate the adoption of new equipment, technologies, code compliance, and energy savings strategies.

As part of the Statewide Codes & Standards Program, the Reach Codes Subprogram is a resource available to any local jurisdiction located throughout the state of California.

Our experts develop robust toolkits as well as provide specific technical assistance to local jurisdictions (cities and counties) considering adopting energy reach codes. These include Cost-effectiveness research and analysis, model ordinance language and other code development and implementation tools, and specific technical assistance throughout the code adoption process.

If you are interested in finding out more about local energy reach codes, the Reach Codes Team stands ready to assist jurisdictions at any stage of a reach code project.



Visit LocalEnergyCodes.com to access our resources and sign up for newsletters.



Contact info@localenergycodes.com for no-charge assistance from expert Reach Code advisors



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