Making ¢ents of Energy: Electricity Pricing Your Bill: Generation, Transmission and Distribution

Margot Everett
Pacific Gas & Electric



PG&E Overview



We are focused on providing safe, reliable, and affordable natural gas and electricity to nearly **16 million** Californians

more than 23,000 employees

5.3 million electric customers

4.4 million gas distribution customers

49 counties served in California

243 cities served in California

7,677
MWh of owned electric generation capacity

\$55 billion in assets

\$15 billion in revenue



PG&E by the numbers

Service Area
70,000 SQUARE MILES

Service Area Population

16 million CALIFORNIANS
(that's 1 in 20 Americans!)



22,000+
EMPLOYEES WHO
LIVE AND WORK
in the communities we serve

220,000+
SOLAR ROOFTOPS
CONNECTED TO OUR GRID,
a leader nationwide





Residential Electric Utility Bill Basics

Residential Customers are Defaulted to a specific Rate

- Currently this is the E1 Rate for PG&E
- California Utilities are testing Time of Use (TOU) rates in anticipation of default TOU rates

Both the default rate and some TOU rates have Tiers such that rates increase as usage increases

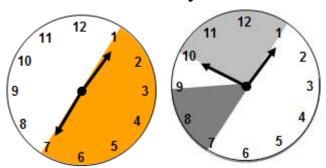
Residential Customers can elect to move to other rate schedules they qualify for

- CARE Rates for customers meeting certain financial criteria
- PG&E currently has three TOU rates available
- PG&E has special rate options for customers with Electric Vehicles

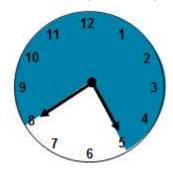
Customers with rooftop solar (Net Energy Metering, or NEM) receive credits in their bills based on the rate they are on (Recent decision requires NEM customers to be on TOU rates)

Time of Use Tiered

Weekday



All Other Hours (including Holidays)

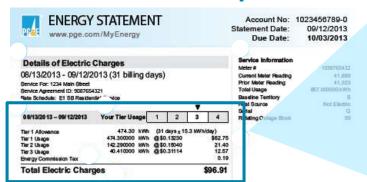






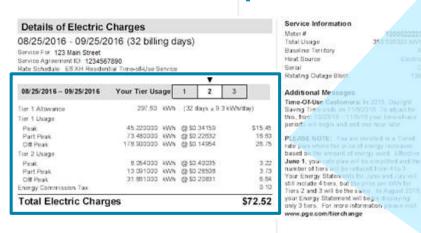
How is Residential Bill Calculated?

An E1 Rate Example:



Energy Charges Calculation – E1 Rate, R Summer					
Tier 1 Allowance	427.8 kW	h (31 d	ays x 13.8 k	(Wh/day)	
Tier 1 Usage	427.8 kW	h @	\$0.18353	\$ 78.51	
Tier 2 Usage	427.8 kW	h @	\$0.24276	\$103.85	
Tier 3 Usage	34.4 kW	h @	\$0.40307	\$ 13.87	
Energy Commission Tax					
Total Electric Charges				\$196.23	

A TOU Rate Example:



Energy Charges	Calcula	ation -	– E6 I	Rate, R Sumn	ner
Tier 1 Allowance Tier 1 Usage	297.6	(31 da	ays x 9	0.3 kWh/day)	
Peak	45.22	kWh	@	\$0.34307	\$15.51
Part. Peak	73.48	kWh	@	\$0.22780	\$16.74
Off Peak Tier 2 Usage	178.90	kWh	@	\$0.15102	\$27.02
Peak	8.05	kWh	@	\$0.40230	\$3.24
Part. Peak	13.09	kWh	@	\$0.28703	\$3.76
Off Peak Energy Commission Tax	31.86	kWh	@	\$0.21026	\$6.70
Total Electric Charges					\$72.97



What is in a Typical Bill?

1-800-456-4743

The back of the Bill:

Important Phone Numbers - 24 hours per day, 7 days per week

1,000,003,0555

Customer Service (All Languages; Relay Calls Accepted) 1-800-743-5000

TDD/TTY (Speech/Hearing Impaired) 1-800-652-4712 Servicio al Citente en Espeñol (Spaniet) 1-600-000-6789 Dich vs. shach sing Vilt (Vetramen)

雜證客戶面解 (Chinese)

You may be adopted for a lover rate. To leave more about optional relation river in complete fail of rates and rates, stall www.ups.com or pail 1-800-748-8000.

If you ballever there is an error on your bill, phase call 1 IDC 7/0 5000 to speak with a representative. If you are not satisfied with our response, contact the California Public Utilities Commission (CPUC), Commission Affairs Branch, 505. Van News Avenue, San Francisco, CA 54102, 1 800-849-7570 or 415-703-2002

To enaid hering service beneficiff while you rest for a CPOC decision, erobies a depoint check (possible to the GPUC) for the disputed around and a description of the dispute. The GPUC will only accept deposits to malliars that relate theory to billing eccuracy. If it is not possible for you to pay your deposit, you must advise the CPCIC. PGBB can not have all your service for compagniors of the it is under review by the CPUC. Reviewer, pour maid confirms to pay your purport sharpes to heep your service burned on

If you are not able to pay your bill, and PGSE's decisions have we are help. You may passify for reclaims under PGSE's CAPE program or offer special origrams and agencies may be available to esold you. You may qualify for PGSE's Energy Serings Assistance Program which is an energy efficiency. program to incurre qualified residential customers

Important definitions

Moteting outage blocks are subject to change reflect advance to the due to operational condition Tier 1/Baseline allowance: Some readouted oten ore given a Tier 1 : Boardine abovarus - a CPUC approved precentage of a reveige customer usage their grounder and order in order. You Tell 1 / Bookie allowance provides for book medical on effectable price and encourages conservators Your altrange is assigned based on the climate others you live. I've common and your heat stratus As you are store energy out play three for usage

Techs:	% of Section
1	2% - 120%
2	101% - 130%
1	101%-300%
4	- 200%
One Two	5 of Society
1	C% 120%
2	= 100%

INR baied charge: Recovers the cool of boods issued by the Dago	desert of
Value Resources (DWR) to purchase power to serve electric outborn	wis daing
tei California energy priess. DWR band uharges are collected on behi	all of DVM

Business Customer Service

DNR prive charge included in prevator danges. In 2016 DNR off mun-\$35, 145,051 to burieful person continues which offsets other germation charges

Power Charge Indifference Adjustment (PGA): Emures that non-energy customers ander PGSE's GT and ECR rate schedules or who purchase electricity (prevention) from row PSSE appliers pay their share of generalism confa-

Day Public Purpose Programs (PPP) Surplings. Used to hard slate reproduct per mondance graphers for the econo contributes, emergy efficiency proports. and public interest recessify and development.

Visit investige combinational or for more strictions. To view rood order tall month including legal or mandated notices, and now agricon deliments.

Total Electric Charges -	\$90.36
Tasse and Other	0.02
Campeliton Trensition Charges (CTC)	1,64
DWR Bond Charge	1.05
Hardest Decomplisationing	0.14
Electric Public Purpose Programs	6.12
Distribution	37.55
Transmissions	12.56
Generation	25.00
Conservation Incenting	\$24.05
Your Electric Charges Breakdown	

POSE value to Parille Day and Electric Company, a calculate of POSE Companion in 2019 Parille Day and 2 hours of the company o

Please do not mark in tox. For system use only

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Plane after 1.7 bills	ing cycles for changes to lake effect	
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Ways To Pay

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- + PGAIL's Mobile Bill Pay
- . By made, Swint your payment along with this payment status to the simulation
- . By debit card, Vina, Mastersard or Discover; Call 1 577 70x 6170 st are
- At a POSE payment operar or local office. To find a payment center or local office many proc. phenes shall recover pipe coors or pail 1, 600-743-5000. Phenes being a copy of your fall refit error.

Bill Components
Conservation Incentive
Generation
Transmission
Distribution
Electric Public Purpose Programs
Nuclear Decommissioning
DWR Bond Charge
Competitive Transition Charge (CTC)
Taxes and Other

Baseline Quantities		
Tier 1	0-100% of Baseline	
Tier 2	100%-200% of Baseline	
Tier 3	> 200% of Baseline	



What is Baseline Quantity?

Existing Tier Structure			
Tier 1	0-100% of Baseline		
Tier 2	100%-200% of Baseline		
Tier 3	> 200% of Baseline		

Baseline Quantities are geographically and seasonally based.

Basic Electric Daily Baseline Values			
Territory	Winter	Summer	
Р	12.3	13.8	
Q	12.3	7.0	
R	11.0	15.6	
S	11.2	13.8	
Т	8.5	7.0	
V	10.6	8.7	
W	10.1	16.8	
X	10.9	10.1	
Y	12.6	10.6	
Z	9.0	6.2	





What are the Bill Components?

	Bill Components
Conservation Incentive	Component of electric charges designed to reflect tiered residential pricing. The adjustment credits customers who primarily use energy within Tiers 1 and 2. The adjustment provides a charge or credit to customers who use energy in Tiers 3 and 4.
Generation	Cost of creating electricity to power your home or business.
Transmission	Cost of transmitting electricity from power plants, over high-voltage lines and towers, to the distribution system.
Distribution	Charge for the lower-voltage system of power lines, poles, substations and transformers directly connecting PG&E distribution lines to homes and businesses.
Electric Public Purpose Programs	Funding programs considered by law to benefit society, such as low-income ratepayer assistance and energy efficiency
Nuclear Decommissioning	Fee to restore closed nuclear plant sites to as near their original condition as possible.
DWR Bond Charge	Recovery of bond costs issued by the Department of Water Resources (DWR) to buy power to serve electric customers during the California energy crisis. DWR bond charges are collected on behalf of DWR and do not belong to PG&E.
Competitive Transition Charge (CTC)	Charge for legacy electricity contracts, signed prior to 1998, that exceed a CPUC-approved market price limit.
Taxes and Other	Tax that PG&E collects for a city or county government. The tax (if any) is a percentage of your energy charges.



How are Bill Components Calculated?

Electric Charges Breakdown – E1 Rate				
	Rate per kWh	kWhs	Energy Charge	
Conservation Incentive			\$ (7.71)	
Baseline Usage	\$ (0.04562)	427.80	\$ (19.52)	
101%-200% of Baseline	\$ 0.01361	427.80	\$ 5.82	
Over 200% of Baseline	\$ 0.17392	34.40	\$ 5.98	
Generation	\$ 0.09684	890.00	\$ 86.19	
Transmission	\$ 0.02340	890.00	\$ 20.83	
Distribution	\$ 0.08589	890.00	\$ 76.44	
Electric Public Purpose Programs	\$ 0.01405	890.00	\$ 12.50	
Nuclear Decommissioning	\$ 0.00022	890.00	\$ 0.20	
DWR Bond Charge	\$ 0.00539	890.00	\$ 4.80	
Competitive Transition Charge (CTC)	\$ 0.00338	890.00	\$ 3.01	
Energy Cost Recovery Amount	\$ (0.00002)	890.00	\$ (0.02)	
Total Electric Charges			\$ 196.23	
	/			

Rate Components can be found in the PG&E Tariff

Total Matches per kWh charges