



Residential Rate Design Fact Sheet and Talking Points

Background:

The Californian Public Utilities Commission (CPUC) is considering making dramatic changes to the way Californians pay for electricity in their homes. In September, the CPUC will hold public participation hearings (PPHs) to gather feedback from the public on this topic.

Last year the state legislature passed an omnibus energy bill (AB 327 – Perea) that enabled the CPUC to consider significant changes to how utilities charge customers for electricity. These changes, proposed by utilities and opposed by consumer groups, environmental organizations, clean energy companies and more, seek to discourage customers from going solar and conserving energy, meaning more revenue for the utilities, more dirty power plants, and less local clean energy.

Q&A:

How are residential electricity bills currently structured?

Right now most Californians pay for electricity based on how much electricity they consume each month. In order to encourage energy conservation, residential customers who use the least amount of energy pay a lower rate for each kilowatt hour (kWh), while those who use the most energy pay a higher rate. Usage is divided into tiers, where all customers get the first few hundred kilowatt-hours at the lowest rate, and then pay higher rates for electricity they use that exceeds the amount allowed under each tier. For example, Southern California Edison has four tiers; the first tier usage costs 15 cents per kWh and rises to 32 cents per kWh in the fourth tier.

Each residential customer is allocated a baseline quantity of electricity for which they are charged the lowest rate (tier one). This baseline allocation varies depending the climate zone in which one resides. Customers living in a warmer climates (the Inland Empire, for example) have a larger baseline than customers in cooler climate (coastal areas) to account for the fact that people in warmer parts of the state typically have higher electricity consumption from air conditioning.

Once a customer surpasses their baseline (average customers will hit the upper limit of their baseline around the 18th-20th of the month), they move into the second tier. Additional electricity consumed at this point costs more per kWh.

Here's a concrete example the CPUC offers to help understand one's bill, using a PG&E customer who consumes 575 kWh over the course of a month. In their climate zone, this customer receives a baseline of 10.4 kWh per day or 312 kWh per month.

First Tier:	(Energy Use Up to Baseline)	= First 312 kWh X 0.11430 per kWh	= \$35.66
Second Tier:	(101% To 130% of Baseline)	= Next 94 kWh X 0.12989 per kWh	= \$12.21
Third Tier:	(131% to 200% of Baseline)	= Next 169 kWh X 0.21314 per kWh	= \$36.02

Total Bill = \$35.66 + \$12.21 + \$36.02 = \$83.89

One thing to understand is that these rates include charges for all the various costs to a utility, including the cost of building new power plants, paying for fuel, maintaining the grid, and more.

What changes are utilities proposing?

The two biggest changes the utilities want to make are:

1. Add a monthly fixed charge of \$10 to each customer's bill (\$5 for low income customers on CARE rates).
2. Reduce the number of tiers and have only a small difference in the rates charged.

How would these changes impact one's bill?

The impact of a fixed charge is straight forward. Every month, each customer would receive a \$10 charge on their bill as a separate line item from their usage. This charge is "fixed" because the full charge must be paid by all customers even if they use little or no electricity; it could not be reduced by conserving energy or going solar. As long as one's home or apartment is connected to the grid, they would be charged \$10 per month.

Utilities are also proposing a massive overhaul to the current tier structure. Under their proposals, four tiers would collapse to two tiers; tier one rates would increase from the current rate, while the cost of electricity in tier two would be significantly less than the rates in tiers three and four now. The result will be a much smaller difference in the rates between the bottom and top tiers, with much less incentive to conserve energy.

It's important to note the utility gets the same total amount of money from all customers combined, regardless of any changes to the rate structure. However, some customers would pay much more while others would pay much less. In particular, customers that purchase the most electricity from the utility will pay less than they do today, while those who purchase the least amount of electricity from the utility will pay significantly more.

What would these changes mean for the environment?

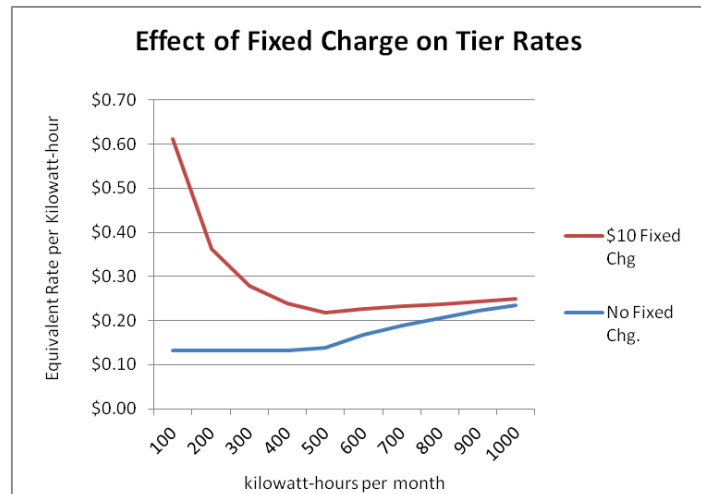
These changes are highly problematic and would have serious ramifications for the further deployment of rooftop solar and energy efficiency: essential solutions to reducing our reliance on dirty gas plants which pollute our air and drive climate disruption.

No Good Deed Unpunished: Fixed charges punish residential customers who do all the right things: lower their energy use and put solar panels on their roof. A fixed charge punishes a customer by eroding the value of their energy conservation measures and rooftop solar. Since no amount of solar or reduced energy use would offset the \$10 charge, *the total amount of bill savings* a customer can get is reduced. Currently cost-effective investments in solar and energy efficiency are made marginal by fixed charges, and investments that are marginal are pushed into financially losing propositions. Fixed charges are contrary to

our energy priorities— they undermine billions of dollars from state rebate programs and billions more invested by customers in energy conservation and rooftop solar; they also put tens of thousands of jobs at risk.

Against Conservation Rates: California’s current rate structure strongly encourages conservation so people who use the least amount of energy pay the lowest rates, and those who use more energy pay progressively higher rates. This is fair because higher energy users impose many extra costs on the electric system, on human health and safety, on the state’s economy, and on the environment. By increasing the cost of energy for people who use the least and lowering costs for those who waste energy, families will save less by conserving or going solar and will thus be less likely to adopt those measures.

Fixed Charges mean...the less you use, the more you pay: The lower line in the chart shows the average effective rate per kilowatt-hour increasing for a residential customer paying progressive tiered rates without a fixed charge. The red line above shows how adding a fixed charge means that people who use the least amount of energy pay the highest effective rate. An effective rate is calculated by dividing the entire bill by how many kilowatt-hours a person consumed in a month.



What does the Sierra Club want?

A minimum bill; not a fixed charge: A smart alternative to a fixed charge is a minimum bill charge. A minimum bill charge can allow the utility to get revenue from each customer without deflating the value of solar or conservation. Minimum bill charges are already in place for all utilities, but they should be reformed to buy a basic volume of service usage for the customer, rather than paying for static infrastructure through a fixed charge. And they should be limited to no more than the currently highest minimum bill already in place to protect the current market potential for conservation and solar energy.

Retain strong conservation rates: We believe that conservation rates are not only fair, but also critical to encouraging clean energy solutions like energy efficiency or rooftop solar. At minimum, utilities should include three balanced tiers. The third tier should begin at 200% of the baseline and charge 2x the tier one rate so that customers are encouraged to use less energy.

What “Problem” Are Utilities Trying to Solve?

Utilities claim that tearing down existing rate design would benefit their customers and are necessary for two reasons:

- Resolving existing bill inequities between hot and cool regions of the state.
- Recovering costs avoided by customers using less energy because of solar or energy efficiency measures.

Utilities argue they are just looking out for their customers. It's hotter in Fresno than Santa Monica, requiring more air conditioning, which results in higher bills for people in Fresno. What's more, the utilities falsely frame this as a class issue: these changes are necessary, the utilities say, to correct for this regional variability that leaves working class communities the Central Valley and Inland Empire paying more than affluent coastal communities. Utilities want us to believe that they are just trying to help struggling Californians by making our system fairer.

The problem with this argument, as intuitive as it may sound, is that it is *not* true. First, this regional variability is already addressed through the climate zones discussed above. Customer bills are normalized to their climate zone, meaning that the people paying the highest energy rates are the ones using more electricity than their neighbors, not more than customers in other parts of the state living in a different climate. As The Utility Reform Network explained last year during the legislative debate over AB 327:

Customers receive a "baseline" amount of electricity at the lowest rate, based on average usage in that customer's climate zone. Above baseline usage costs more. The beauty of the way our baseline system works is that customers in the hot Central Valley get more than twice the summer allowance Bay Area residents do, and at 1000 kilowatt hours pay roughly a third less per kilowatt hour for their electricity.¹

Second, when it comes to who pays the most for energy, it's the richest neighborhoods that pay the most. Again, from TURN:

In fact, average rates are highest in wealthy Bay Area communities where customers have large homes and lowest in California's poorest communities. The 15 communities with the highest rates have a median household income of \$160,121 a year, and the lowest rates are in communities with average incomes of just \$42,102. Households with the highest usage within their climate zone, typically wealthier customers, pay the highest rates.²

Next, utilities argue that solar customers currently avoid paying for maintaining the grid, which solar customers still use—for example, after the sun sets. Utilities rightfully point out that maintaining the grid has costs and so they argue that solar customers are not paying for the maintenance of the grid because they're offsetting their bill with solar credits through net-metering (NEM). This "cost-shift," the shifting of cost for maintaining the grid from solar customers to non-solar customers, must be addressed, the utilities claim.

The problem with this argument is that it's also *not* true. A report by E3 last year found that California utilities get back 103% of the cost of serving net-metering customers.³ This is because NEM customers as a rule do not zero out their bills, but do in fact pay a considerable amount of money to utilities. There is significant variation between customer classes and utilities, but on the whole the study finds that all NEM customers combined pay a little more than their fair share-- 103% of what it costs to serve them. Residential customers are estimated to pay somewhat less than their share while commercial customers are estimated to pay somewhat more. Moreover, the utilities argue that they need to ensure they have enough funds to maintain their infrastructure as customers continue to reduce their energy use. The utilities argue they need the fixed charge for this maintenance. This too is not true. In fact, every two years, the Public Utilities Commission allows the utilities to set their rates in a way that ensures that infrastructure

¹ <http://turn.org/issues/energy/item/588-pge-rate-plan-shift-burden.html>

² Ibid.

³ http://www.cpuc.ca.gov/PUC/energy/Solar/nem_cost_effectiveness_evaluation.htm

costs are covered. The claim that a utility with a guaranteed a rate of return might not recover its costs is specious. The house, as they say, always wins.

Talking Points:

Top line message: we urge the Commission to reject the greedy proposal for a fixed charge.

The proposed changes by utilities are unacceptable and threaten our energy efficiency and rooftop solar programs. As a result, they are deeply out of line with state and public priorities on energy and climate.

From longer wild fire seasons, to damage to crops, and shrinking water supplies, Californians are already feeling the damage to our economy and environment from climate change. We need to be moving faster to deploy clean energy, not putting up road blocks like Southern California Edison's proposal.

We can't afford to tap the breaks on rooftop solar deployment. Already, more than 47,000 Californians work in the solar industry – more than the number of employees at all three investor owned utilities combined! If the utilities have their way and impose these changes, we risk losing jobs in critical California industries.

Southern California Edison is out of touch with its customers. Rather than working to provide better access to wildly popular efficiency and solar programs, they are unfairly blaming their customers and looking to punish them for being clean energy leaders.

These proposals would raise energy costs for low and middle income customers, those who can least afford to pay more on their energy bill.

We urge the commission to reject the fixed charge proposal. We simply can't afford to give away \$120 every year per customer just for the "pleasure" of doing business with the monopoly utility in our region.

Utilities want to lock down much more money. Utilities want to be able to increase fixed charges to \$10 per month for most residential customers, and to \$5 per month for low income customers. Over a 25 year period, these charges would collect up to \$38 billion in revenue—money locked into utility hands so it can never benefit solar or conservation.⁴

Rate design should ensure that customers continue to have a strong financial incentive to choose clean energy solutions like energy efficiency programs or rooftop solar over the standard dirty power supplied by their utility.

Utilities claiming they care about their customers is like Colonel Sanders claiming he cares about chickens. It doesn't add up. Utilities have shown time and again they have little regard for their customers. Look no further than the San Bruno crisis or the mishandling of the San Onofre boondoggle to see examples of the utilities putting profits ahead of their customers.

⁴ The increase includes household growth plus an inflation adjustment currently included in AB 327, which is assumed to be 2% per year.