



Frequently Asked Questions

WHAT IS NET ENERGY METERING (NEM)?

- Net Energy Metering (NEM) was established in 1995 to incentivize Californians to install what was then a new technology, solar panels, on their homes. The goal of NEM when launched was to jumpstart solar rooftop technologies, drive down costs and contribute to the growth of renewable power in the state. It worked! While the original goal of the program was to establish 10,000 home-based systems, there are now over 1 million homes with solar systems.
- Under NEM, customers with rooftop solar receive a credit on their electric bills when their system generates more power than they need, and that power is sent back to the grid. The goal was to establish a credit generous enough to help pay off their systems over a reasonable period.
- The credit was set to mirror what customers pay for that same amount of power on their own bills (the retail price of electricity).

WHY ARE CHANGES NEEDED TO NEM?

- A lot has changed in the 25 years since California launched its program to incentivize rooftop solar, but there have been no meaningful changes to NEM or adjustments to the credit paid for excess power generated by rooftop systems. That credit is still based on the retail price of electricity, which continues to increase even though the cost of solar systems and renewable power has decreased over time.
- **Electricity customers without solar systems pay an additional \$3.4 billion more annually in their bills or as much as \$245 more per year** to subsidize solar customers who are no longer paying their fair share to maintain the electrical grid. If no changes are made this amount will grow to \$10.7 billion in ten years, or \$555 per customer per year.
- Without changes, millions of low- and middle-income renters and homeowners in California without solar systems will continue to pay significantly more than their fair share of costs to maintain the electric grid and for state-mandated programs like energy efficiency and low-income assistance.

HOW EXACTLY DO BILL CREDITS FOR CUSTOMERS WITH ROOFTOP SOLAR SYSTEMS INCREASE THE BILLS OF CUSTOMERS WITHOUT ROOFTOP SOLAR SYSTEMS?

- The credits paid to customers for excess power generated by their rooftop solar systems reduces their bills so significantly that solar customers are no longer contributing their fair share (some pay nothing at all) toward costs associated with maintaining the electric grid or toward state-mandated public policy programs like energy efficiency and low-income assistance public purpose programs. As a result, customers without solar systems contribute more than their fair share toward these costs—as much as \$245 more per year and that is anticipated to increase significantly over the next few years.

- Solar customers still receive value from the grid, which provides power to their homes when their solar panels cannot, such as in the evenings or when it is cloudy. Solar customers effectively use the grid as a battery. This is why it is important for solar customers to pay their fair share.

WHY ARE COST BURDENS FALLING DISPROPORTIONATELY ON LOW- AND MODERATE-INCOME ELECTRICITY CUSTOMERS?

- Because wealthier Californians are more likely to own their own homes, have credit scores that allow them to qualify and the means with which to invest in rooftop solar systems. According to the Lawrence Berkeley National Laboratory, **70% of California solar adopters are in the wealthiest 40% of society.** So, while all electricity customers – those with solar rooftop systems and those without – depend on the electric grid, the burden for paying for its upkeep is falling increasingly on those least able to pay. As an example, customers in San Diego who qualify for the California Affordable Rates of Electricity (CARE) program pay an average of \$9.50 more per month, or 13% extra on their bill to help subsidize solar rooftop systems.

WHY DOES THE COST BURDEN ON CUSTOMERS WITHOUT ROOFTOP SYSTEMS CONTINUE TO GROW?

- Because the credit paid for excess power is tied to the retail electricity rate which continues to increase, and because the number of customers with solar systems, some who pay only the nominal \$10 per month minimum bill, continues to grow. When NEM was first launched there were fewer than 500 solar systems and today there are over 1 million. Continued growth of rooftop solar systems – particularly those paired with storage – will play an important role in California’s transition to a clean energy future. But without meaningful changes to the NEM program, the pool of customers without solar rooftop systems will shrink yet they will shoulder an increasingly unfair burden of costs for infrastructure and programs that benefit all.

SINCE ANY POWER GENERATED FROM A ROOFTOP SOLAR SYSTEM REDUCES THE POWER NEEDED TO BUY FROM OTHER SOURCES, ISN'T IT ONLY FAIR TO PAY CUSTOMERS FOR THAT EXCESS POWER?

- Absolutely. But the price paid for that excess power should more accurately reflect the actual value. **Today, customers with rooftop systems are essentially paid an average of \$0.25 for each kilowatt of solar power sent back to the grid, even though that same solar power costs \$0.03 from large, non-residential solar systems.** The mandated per-kilowatt rate for solar power generated rooftop systems continues to increase even though the cost of the solar systems themselves have dropped 70% in the past 25 years. This makes no sense and is needlessly driving up electricity rates for millions of Californians who don't want or can't qualify for a rooftop solar system.
- Since California is already legally required to transition to zero-carbon energy by 2045 and there is now an abundance of lower-cost renewable power options, it makes no sense to pay eight times more for power generated by a solar rooftop when that same power can be purchased on the wholesale market at a significantly lower rate. And based on current NEM policy, utilities must pay that inflated rate for excess power generated by rooftop systems even when it is not needed – such as the middle of the day when solar supply exceeds demand.

IF CHANGES TO NEM RESULT IN LOWER MONTHLY BILL CREDITS FOR FUTURE CUSTOMERS WITH ROOFTOP SOLAR SYSTEMS, WON'T FEWER CUSTOMERS BE MOTIVATED TO MAKE THE INVESTMENT?

- No. Solar rooftop systems – particularly those with storage systems – will continue to play an important role in the state's transition to a clean energy future. And customers will continue to be motivated by savings on their electric bills which they can use to pay off their systems.
- As currently structured, NEM is unsustainable because an increasingly smaller number of electricity customers are responsible for paying for investments in the electric grid everyone depends upon and for state-mandated public purpose programs.
- We are confident the CPUC can find a balance between continuing to incentivize future customers to install rooftop systems while also ensuring the amount of the credit more accurately reflects the value of the energy being provided.
- California has more than 1 million rooftop systems and the cost of technology has dropped 70%. The NEM credit should better reflect this progress and the state's environmental and energy policies of 2021, instead of 1995.
- Any changes to NEM should also ensure that all electricity customers – those with solar and those without – continue to pay their fair share of costs associated with the electric grid and state-mandated public policy programs such as energy efficiency and low-income assistance.

SHOULD CHANGES TO NEM ONLY IMPACT FUTURE CUSTOMERS OR ALSO THOSE THAT CURRENTLY HAVE ROOFTOP SOLAR SYSTEMS?

- Our coalition will be encouraging the California Public Utilities Commission (CPUC) to update NEM so that **all** electricity customers with rooftop systems pay their fair share toward the electric grid and public purpose programs. We also believe all current and future customers with rooftop solar systems should be given an opportunity to recoup their investment over the life of the system. This is a complex issue, and we are confident the CPUC will find the balance between incentivizing future rooftop growth, honoring existing rooftop contracts and ensuring all electricity customers pay their fair share toward the grid and public policy programs.

GIVEN THE STATE'S ENERGY SHORTAGE, ONGOING WILDFIRE THREATS THAT LEAD TO PUBLIC SAFETY POWER SHUT-OFFS, AND RELIABILITY ISSUES, DON'T WE NEED MORE, NOT LESS, CALIFORNIANS GENERATING THEIR OWN POWER?

- Solar rooftop systems with storage can help bolster the reliability of California's electric system. While pace of solar paired storage systems has increased in recent years, currently less than 4 percent of the 1 million rooftop systems in California have storage systems. Solar systems without storage provide limited value during systemwide outages. Any changes to NEM need to incentivize solar systems paired with energy storage over stand-alone systems. Storage is necessary to help manage the current glut of midday solar so it can be stored when there is low demand in the middle of the day and be available during peak evening demands.

WHAT IS THE CURRENT MONTHLY BILL CREDIT PROVIDED TO CUSTOMERS WITH ROOFTOP SOLAR SYSTEMS?

- The monthly credit is different for every customer depending on the size of their system and how much extra power they send back to the grid. But the per-kilowatt amount mandated by NEM is the same for all customers statewide and is tied to the retail cost of electricity – which averages 25 cents per kilowatt sent back to the grid. This is despite the fact the same solar power can be purchased from large scale systems from 3 cents.
- Because of the generous rate being paid for power sent back to the grid, an electricity customer with an average size rooftop solar system, currently receives an average monthly bill credit of \$200 which enables them to pay off the cost of their system within 5-7 years.

DO CUSTOMERS WITH ROOFTOP SOLAR SYSTEMS CONTINUE TO RECEIVE BILL CREDITS AFTER THEIR SYSTEMS ARE PAID OFF?

- Yes, under the current policy, some customers who installed solar over 20 years ago are still receiving a monthly NEM credit today. Under today's NEM policy, current customers are assured retail rate payment for excess power for 20 years. So, customers who purchased a system in 2010 will continue to be reimbursed the full retail rate for excess power generated by their system through 2030 regardless of when their system was paid off.
- Similarly, under current NEM rules, customers without solar also will continue subsidizing solar customers in perpetuity.