

FAQ: Time-of-use pricing

Time-of-use rates help customers save money on their electricity bills by offering cheaper rates when energy demand is lower or the energy available on the grid is powered by renewable sources, like solar and wind. Time-of-use pricing is a common approach to helping people better understand when electricity is cheaper and cleaner. Otherwise, those renewable resources can go to waste. Right now California businesses use time-of-use rates and consumers can opt into them. Starting in 2019, time-of-use pricing will be the norm in California.



Run major appliances during off-peak hours when electricity prices are lower.

How does it work?

Typically, time-of-use electricity rates are low from the early morning to mid-afternoon and on the weekend. Each utility is a little different, but, for example, in the summertime peak pricing generally goes into effect on weekdays from 4:00pm-9:00pm when demand is usually higher, and renewable energy production lower.

How can time-of-use help me save money?

On a flat electric rate, you have no way to take advantage of cheap energy generated from solar and wind. All energy costs the same and the only way to reduce your bills is to simply use less electricity.

With time-of-use, you have more control over your energy bills. When you shift your energy use to off-peak times, you can save substantially because the rates are lower. Shifting your energy use can be simple and easy because the times that prices go up or down are the same every weekday.

How is this change going to affect energy bills?

Over the course of a year, overall energy bills will generally go down with this pricing method. Bills may vary month to month depending on whether you use more energy in one month compared to another. However, depending on weather and lifestyle choices, research shows that on an annual basis most customers will see lower bills overall because daytime rates are expected to be significantly lower than they are today, to help make up for the difference in pricing for peak times. And if you are not sold on the benefits, you will always retain the option to opt-out.

How does time-of-use benefit the environment?

The electric grid works when energy supply matches energy use. When there is a mismatch in this equation, we experience brownouts and blackouts. The tricky part is, utilities don't know exactly when we'll want to do our laundry, or run the air conditioner, so they make educated guesses based on big data modeling. When their guesses are wrong, utilities turn on highly-inefficient and polluting fossil fuel generation sources to meet the high demand. Known as "peaker plants" these facilities often produce more pollution and are often located in lower income communities. By switching to a time-of-use pricing model, we'll shift more energy use to renewable sources and have less of a need for peaker plants-resulting in cleaner air for the

CLEAN ENERGY



Save money See significant savings on your electricity bill.



Cut pollution

Run fewer power plants during the peak hours and cut harmful emissions.



Don't waste solar

Use energy when it is powered by solar so it doesn't go to waste. communities living near these dirty, unnecessary plants.

How will time-of-use affect renewable energy development in California?

Did you know 300,000 megawatt hours of clean, affordable energy went unused in 2016? That's almost enough to power the homes (45,000) of the entire city of Palm Springs or San Luis Obispo for a whole year. Today, we have new, cleaner, cheaper ways of generating electricity, but an old pricing model. Time-ofuse is a modern price structure for modern energy like solar and wind.

Today, utilities let excess solar and wind go unused or they ship it out of California because there is not enough demand for these resources when they are available, namely during the day. Demand is low, in part, because the prices we pay as customers don't reflect how cheap renewable energy really is. Time-of-use pricing changes this by encouraging everyone in California to use more energy during the daytime when it is affordable and abundant, and less when energy is more expensive and generated from fossil fuels.

When will utilities switch people to time-of-use?

Currently, all commercial businesses in California are already benefitting from timeof-use pricing. Additionally, residential customers currently have the option to select a time-of-use pricing structure with their utility. Starting in 2019, all California residential customers will be switched to time-of-use rate plans. Before that happens, the state's three investor-owned utilities – SDG&E, PG&E, and SCE – are piloting time-of-use pricing with select customers in 2017 and 2018 to ensure the rates allow people to lower their costs, and the utilities to put more renewable energy to use on the grid when it is abundant.

How do I save money on time-of-use rates if I cannot afford smart home technologies?

You don't need smart home technologies to save money on your energy bills. Instead, most people do it by slightly changing their energy habits. Try things like:

- Switching the use of large appliances like dishwashers and laundry appliances to daytimes and weekends.
- Instead of doing a little bit of laundry each night, save it for the weekend.
- Wait to run the dishwasher when you go to bed or wake up.
- If you are home during the day and you know it's going to be exceptionally hot or cold outside, use more electricity to precool or pre-warm your home, then turn it down before rates go up.
- Consider if you need all of the fans set to high, or just a few, or all of them at low.
- Look out for electronics that are always plugged in. These "vampire loads" quietly suck energy even when they are in their "off" mode. Plug these electronics into powerstrips, where possible, so you can turn them off when not in use.
- Consider how cold your refrigerator really needs to be and adjust the temperature to be slightly warmer if possible.
- Wash clothing in cold water to reduce the energy your hot water heater uses.
- When you do make new product purchases, look for Energy Star items that are recognized by the U.S. government as energy efficient.

How can time-of-use help me save money if I work outside of the home during the day or if I stay home most of the day?

No matter where you are during the day, at work or at home, you can make the most of time-of-use pricing by shifting your large appliance activities to morning and early afternoon hours, or to weekends.

How can time-of-use help me save money if I live in a hot climate and rely on air conditioning consistently?

In homes that require constant heating or cooling, you could use more energy to bring your home to the temperature you desire when prices are low, then turn off or reduce your energy use to a minimum to maintain a comfortable temperature during high-priced times. By manually precooling or preheating your home, you can surf the wave of energy prices without being hit with higher energy bills when prices go up in the afternoon.

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