We often get calls from customers who have talked to solar companies about how solar will prevent them from having a utility bill. In most cases, this simply is not true. Below is some information that answers frequent questions and will help LID customers better understand how the Wholesale Generation Credit (WGC) program works. For more information on how rates are set, please see the information in our Billing and Payments section:

HOW THE LID SOLAR PROGRAM WORKS:

The State of California enacted legislation requiring utilities to adopt a Net Metering (NEM) program to incentivize the use of solar energy, but recognized at the time that this would put a burden on other customers of the utility. As part of this legislation, the State allowed utilities to close the programs when they reached a certain percentage of rooftop solar. LID reached that limit and exceeded it in 2018, but rather than close solar completely, opted to allow customers to continue to install solar but in a way that it did not negatively impact other customers. The Wholesale Generation Credit (WGC) rate was implemented to allow customers to install solar and have a way to sell their excess energy. Under this program, customers installing solar are limited to 125% of the annual usage of their homes, but often we hear customers being told by solar sales people that they "need more panels so they can sell power back to the utility". If you do the math, this is not a good plan because it probably costs between $.10 and $.15 per kwh to produce the solar energy because the solar companies are in business to make money. While this may be a good price compared to paying the retail utility rates, it does not make sense to over produce and get paid the market value for that energy. Solar is supposed to be used in conjunction with the utility system, and should not add a burden to other customers of the utility. While LID is in favor of solar to the extent it is safe and helps customers, we do have to make sure we are not allowing an overproduction of energy to negatively impact our system and cause additional unnecessary costs to all customers.

(Customers who were already enrolled in the NEM program are still on that program, so the information on the WGC rates will not apply. If you are not sure which rate you home is on, please give us a call).

WHY IS MY ENERGY NOT WORTH WHAT I PAY TO USE UTILITY ENERGY?

The average price LID pays per kwh of electricity averages $.04, but we also pay PG&E to use their system to get the energy to our substation, as well as the California Independent Systems Operator (CALISO) to use the grid, and wheeling (transportation) costs to deliver that kwh of energy to our substation. At that point, LID transforms it to a useful voltage and then sends it over our system to customers. The additional costs to deliver a kwh of energy (not including business expenses) add up to about $.076. When the WGC was first established, the payment rate for the excess generation was set at $.076 per kwh, so in essence LID was paying solar customers for the "cost" of the kwh of energy and the costs associated with getting that kwh to our system, which is not the case with a kwh of solar energy purchased "on-site". The District was basically paying more than what the actual kwh of energy was worth, therefore the rate was adjusted to reflect the actual value of the energy and will be reviewed annually and adjusted, if necessary, to keep with market values. For comparison, PG&E pays approximately $.03 for any excess energy over and above their program and because they have not met the threshold for Net Metering. PG&E rates have increased significantly in recent years to offset the losses that the Net Metering program has caused.

As an example, here is what PG&E tells solar companies to tell their sales people to set responsible expectations:

How to Talk to Customers About...

DISCUSS ROLES AND RESPONSIBILITIES	⌄
EXPLORE RATE OPTIONS FOR RENEWABLE SYSTEMS	⌄
REDUCE ENERGY CONSUMPTION	⌄
RECOMMEND PROPER SYSTEM SIZE	⌃

Increased customer satisfaction comes from sizing the system to best meet customers' usage needs and savings goals. For customers on a time-of-use rate, PG&E recommends sizing the system to offset 80 to 85 percent of the average electricity usage in order to minimize the electricity bill. For non-time-of-use rate schedules, PG&E suggests sizing the system to offset 90 to 95 percent of customers' annual needs in order to minimize the electricity bills.

Please note that Net Energy Metering (NEM) systems may be sized no larger than 110 percent of the customer's total previous 12 months of usage or projected future increase. Please advise your customers about the most efficient options.

For additional customer information on system sizing and energy efficiency: Visit **How system size affects costs for solar and renewable energy systems**.

Important Note: There is no incentive for the customer to install a system larger than the home or business needs. Compensation for excess generation through Net Surplus Compensation is set by the California Public Utilities Commission (CPUC) at roughly $0.03 to $0.04 per kilowatt-hour (kWh) and *does not justify the cost of an oversized system.*

SHOW CUSTOMERS WHEN AND HOW TO TURN ON THE SYSTEM	⌄

Full article: https://www.pge.com/en_US/for-our-business-partners/interconnection-renewables/simple-solar-wind/contractor-resources/help-your-sales-team.page

Remember, when the utility purchases energy, we have to add in all of the costs associated with delivering that energy to customers in the retail rate (costs such as substation, wires, transformers- all of the labor to keep the District running and other costs to do this). It is the goal of the District to keep rates as low as possible, and the kwh charge for residential customers has been stable for over the past three years (meaning the seasonal retail kwh charge has not changed to customers) because of our constant efforts to keep costs down, including the cost of purchasing energy. If the District continued to pay solar customers double what it was worth, the rates charged for what we deliver to customers would have to change to reflect this through an increase in retail rates, just as PG&E and other utilities have done.

WHY DO I HAVE TO PAY AN INFRASTRUCTURE CHARGE IF I HAVE SOLAR?

The District still has to provide all of the equipment regardless of whether a customer is solar or non-solar, so these costs are spread evenly based on the total usage of the home through the Infrastructure charge, which vary depending on how many kwh the home uses each month (this can be $16, $24, or $32 and changes based on the monthly usage).

 The District experiences huge increases in the cost of power during times like we see in July and August-- the State often experiences "power shortages" of sorts, which drives the cost of a kwh of energy up significantly. This is due to an extreme increase in energy usage by all of California because of the hotter than average temperatures and reduction in energy production by fossil fuel sources (hence the threat of "rolling blackouts by PG&E). In order to not burden our rate payers with sudden changes, we set the kwh rate to cover the entire year average cost (including our delivery costs) and that is where the retail kwh prices come from. Unlike Costco, the State requires utilities to charge a higher price to customers for more usage to promote conservation. The goal of a solar array should be to protect a homeowner from falling into the higher cost tiers and cover only the anticipated annual usage, and should never be a plan to make money from the utility. We often hear a customer say that their solar rep told them they would "never have a power bill if they just purchased more panels". Those panels come at a cost, and if you were to sit down and compare the cost per kwh it is likely that the savings is not anywhere near what the solar company promised. Unfortunately, we cannot control what they tell customers and they do not take responsibility after the fact. All we can do as the utility is to continue to try to keep costs down and therefore keep rates as low as possible. The State does not make that easy with the mandates to pass along charges such as the Renewable Energy and Resource Adequacy fees, wheeling charges and other fees that all utilities, all of which are paid by customers through rates. We strive to assign the fair share to all customers, as well as constantly analyze how we do business to be as cost effective and efficient as we can.

 HOW CAN I LOWER MY BILL USING SOLAR?

Now that you have a little better understanding of why the rates are what they are, let's talk about how you can maximize your solar investment. If you have solar and you are overproducing during the hottest time of the year, you are either:

> 1) not maximizing your solar production by using your energy in accordance with when you are producing it and using the utility power instead, or,

> 2) your system is oversized for the needs of your home resulting in an overage of power being produced (recommended size for solar production is 85% of your annual usage).

To help answer this question, look at your summer LID bill to see if you are producing an excess of power in August (which is when you most likely use the most energy). If your excess generation is over 5% of the total energy you produce, you are probably not using your energy while it is being produced by your solar. Remember, your solar only produces what it can produce when the sun shines, it does not add or take away based on what your home is using. If you are doing laundry or charging a car at night, you are using utility power (unless you have installed a battery system, which can be expensive). You can cool your home in the afternoon before the sun goes down so you aren't cooling as much later when you are on utility power. Setting the dishwasher to run during the day (in the morning before your AC runs) and doing laundry, charging your car, and other tasks that use energy when your

solar is producing you can make your system more efficient. Of course, you may not want do all of these things at one time since your solar array may not produce enough to cover it all at one time, but if you can stagger it out you may offset your utility usage by a lot. By making some adjustments to when you use your energy, you can maximize your solar production and be less reliant on utility energy.

Also keep in mind that the utility does have to purchase back up power to provide to customers at a moment's notice in case your (and your neighbors') solar array fails or production is reduced, which during the recent smoky days has occurred-- a lot. Most solar panels are not designed to work as efficiently when temperatures are extreme, so during the summer with hot temperatures and smokey skies, the solar production in all of California was reduced. This results in many customers using more utility energy without realizing it, and also adds to the potential for rolling blackouts in the State. Being energy conscience works whether you have solar or not.

Every home is slightly different, depending on which rate (NEM or WGC), how the large the solar array is compared to the home's usage, and how the home uses energy. Your neighbor may not be a good comparison -- for example, think of it like a car: if you and your neighbor have the exact same car but you drive conservatively and your neighbor is a "lead foot", your neighbor is going to use more energy (gas). If you drive a 4x4 pickup and your neighbor drives a Prius, you are going to use more energy. There are many things to look at when analyzing energy usage, and we are here to help you. Understanding solar and how it works with your utility energy is complicated, and there is no one answer that fits all situations. Using the information above you can maximize your investment in solar. The information here is a guideline to help understand some of the variables, but if you still need help please let us know.