Santa Clara Solar

Net Metering Explained

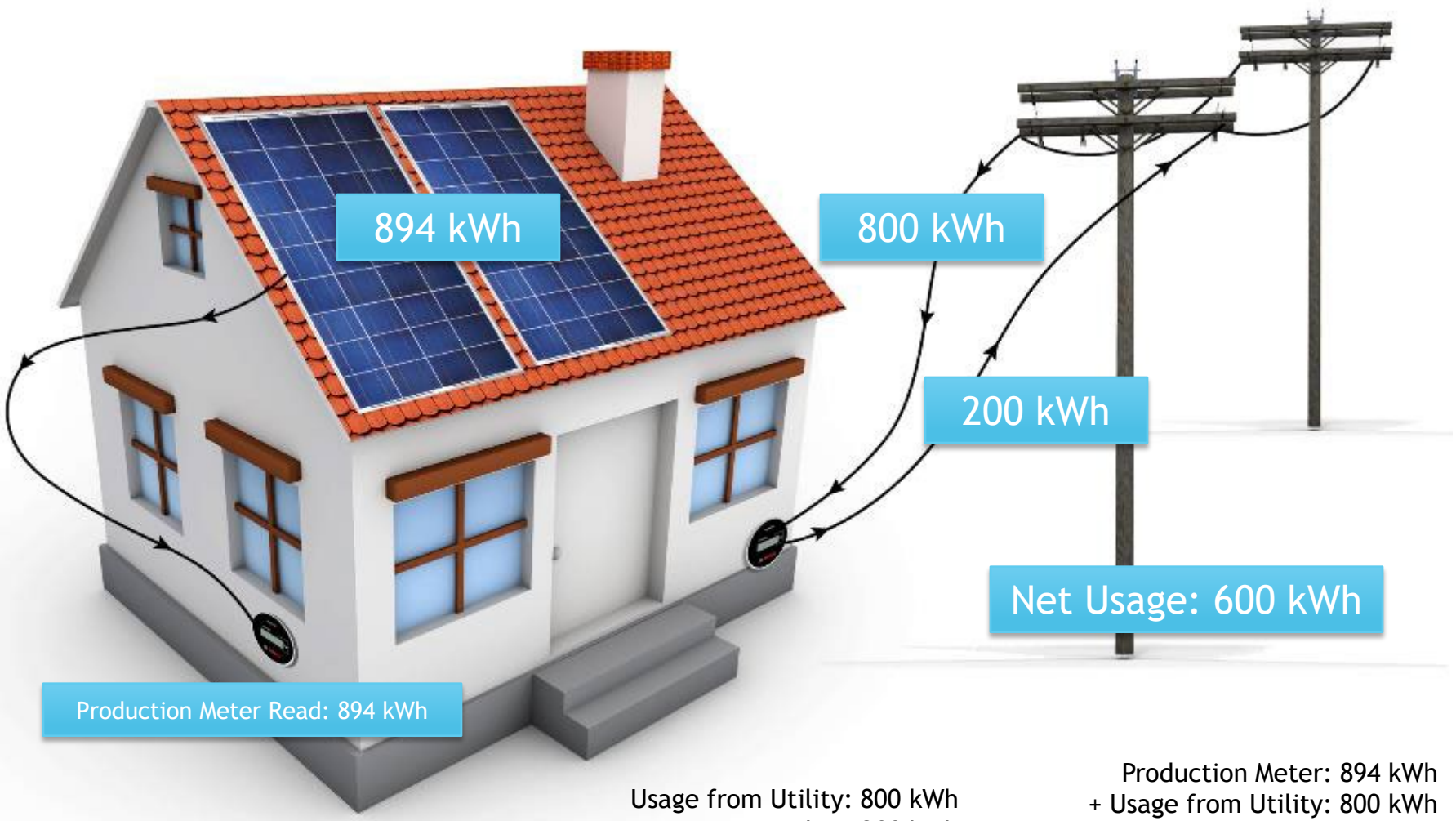
What is Net Metering?

- How does it work?
  - The Customer uses energy produced from their solar panels.
    If they produce more energy than what the home needs, the excess energy is fed into the Utility.
  - Santa Clara City provides power to the customer when needed (when the solar panels aren't producing enough energy).
  - The Customer is billed off the net usage between what they used from the City and the energy they fed into the Utility.

Let's see this in action…

Solar Customer with 6 kW Installed

On average 1 kW will produce 149 kWh's per month. This home can produce an average of 894 kWh's per month. (6 kW x 149 kWh = 894 kWh's). At any time during the month, this customer used 800 kWh's from the City. At any time during the month, the customer provided 200 kWh's into the Utility. The home used 1494 kWh's during the month. The Total Net Usage the Customer is billed is 600 kWh's.



Usage from Utility: 800 kWh
- Excess Energy into Utility: 200 kWh
= Total Net Usage: 600 kWh's

Production Meter: 894 kWh
+ Usage from Utility: 800 kWh
- Excess Energy into Utility: 200 kWh
= Total Home Usage: 1494 kWh's

How are Solar Customers Billed?

1. Solar Customers shall be billed for the appropriate customer service charge (Base Rate) as other customers of the City in the same rate class.
2. One of these two options:
   - If the Customer uses more energy from the City than the energy supplied back into the Utility, then the customer shall be billed for the net kWh usage in the same rate class as other Customers of the City.
   - If the energy generated by the Customer and distributed back to the Utility exceeds the energy supplied to the Customer, then the Customer shall be credited for the excess net energy at the Renewable Power Rate of .04 cents per kWh.
3. Billed the Solar Reliability Charge.

What is a Solar Reliability Charge?

Solar Reliability Charge (SRC)

A Solar Reliability Charge (SRC) will be applied to a Customer's bill monthly based on the kW capacity of the solar PV system installed. This charge reflects the cost of the Santa Clara City Utility to provide full service to meet the full demand of net-metered customers.

Why do we need a Solar Reliability Charge?

The Avoided Cost Study completed in December of 2015 provided answers to questions asked regarding the impact of solar on our distribution system.

- Is there a cost to the Santa Clara Utility for Solar Customers?
  The Study determined yes, there is a cost.
- According to the study, Santa Clara needs to collect $4.05 per kilowatt installed to cover costs on our system. City staff and council elected to reduce this charge to $2.05 per kilowatt installed to make installing solar more economically feasible for our customers.

Solar Reliability Charge (SRC)

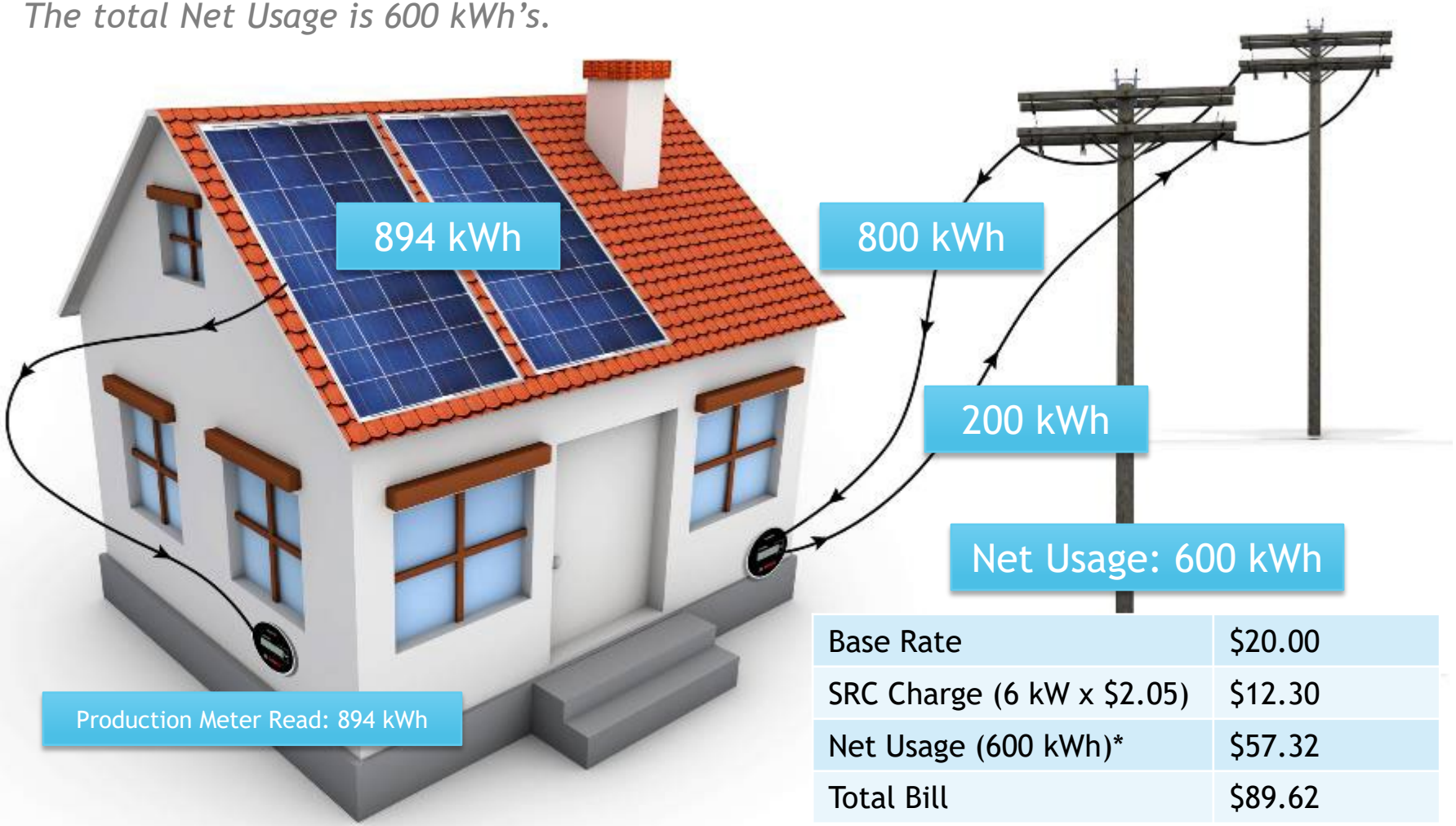
kW Size	Monthly kWh * Charge	SRC
1 kW	1 * 149 = 149 kWh * $0.01376 =	$2.05
2 kW	2 * 149 = 298 kWh * $0.01376 =	$4.10
3 kW	3 * 149 = 447 kWh * $0.01376 =	$6.15
4 kW	4 * 149 = 596 kWh * $0.01376 =	$8.20
5 kW	5 * 149 = 745 kWh * $0.01376 =	$10.25
6 kW	6 * 149 = 894 kWh * $0.01376 =	$12.30
7 kW	7 * 149 = 1,043 kWh * $0.01376 =	$14.35
8 kW	8 * 149 = 1,192 kWh * $0.01376 =	$16.40
9 kW	9 * 149 = 1,341 kWh * $0.01376 =	$18.45
10 kW	10 * 149 = 1,490 kWh * $0.01376 =	$20.50
11 kW	11 * 149 = 1,639 kWh * $0.01376 =	$22.55
12 kW	12 * 149 = 1,788 kWh * $0.01376 =	$24.60

To determine your SRC charge, take the total kW installed and multiply by 149 kWh (estimated generation per month), to get the total kWh solar generation for the month. The Solar Reliability Charge is $.01376 per kWh or $2.05 per kW.

Let's look at our first example to see how it would be billed.

Solar Customer with 6 kW Installed

This Customer used more energy from the City than it fed into the system. They used 800 kWh's from the City and supplied 200 kWh's into the Utility. The total Net Usage is 600 kWh's.



Base Rate	$20.00
SRC Charge (6 kW x $2.05)	$12.30
Net Usage (600 kWh)*	$57.32
Total Bill	$89.62

**Billed on Santa Clara's normal rates*

Credits for Solar Customers

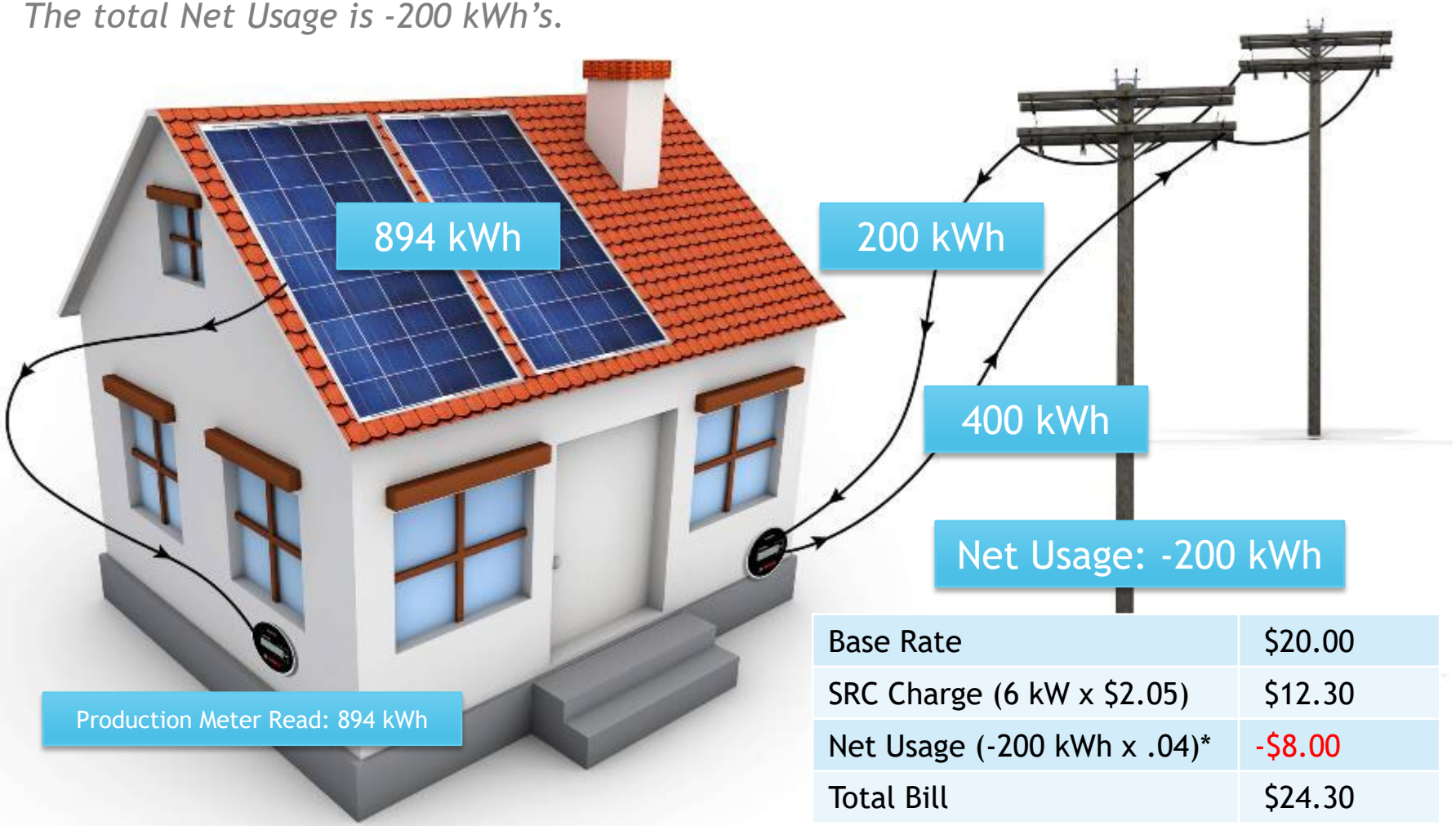
How do Solar Customers receive a credit?

- If the energy generated by the Customer and distributed back to the Utility exceeds the energy supplied to the Customer, then the Customer shall be credited for the excess net energy at the Renewable Power Rate of .04 cents per kWh.

Let's look at our first example again, this time as a credit.

Solar Customer with 6 kW Installed

This Customer provided more energy to the Utility than it used from the City. They used 200 kWh's from the City and supplied 400 kWh's into the Utility. The total Net Usage is -200 kWh's.



Base Rate	$20.00
SRC Charge (6 kW x $2.05)	$12.30
Net Usage (-200 kWh x .04)*	-$8.00
Total Bill	$24.30

**Credited at the .04 cent Power Reliability Rate*

Summary

Santa Clara City Staff has been working with Residents, Solar Companies, City Council, other Municipalities and UAMPS to come up with the best win-win solution available for the City and all of our Residents.

We understand Net Metering is preferred amongst residents and Solar Companies and we want to invite future solar customers to come to Santa Clara.

At the same time, Santa Clara City also needs to make sure our costs are covered so we can continue to provide energy to all our Customers.

Staff feels the Solar Reliability Charge is best possible win-win solution for the City and all of our Residents.