


Steve's Experience
SOLAR PANELS




QUESTIONS????

- Raise your hand if you are a Leisure Village resident or homeowner with rooftop solar.

MY REASONS TO CONSIDER SOLAR PANELS

- ◆ Lower Electricity Bills
 - ◆ Government Incentives
 - ◆ Energy for Electric Vehicle
 - ◆ Reduce Carbon Footprint
 - ◆ Set Example for Family Members
- 

MY PREVIOUS EXPERIENCE WITH SOLAR PANELS

- ◆ Lived in Virginia 2005 to 2020
 - ◆ Lived in Two 55+ Communities
 - ◆ Saw Thousands of Homes
 - ◆ How Many Homes with Solar?
 - ◆ Zero
 - ◆ Why?
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CAVEATS

- ◆ Steve's solar installation was prior to California's Public Utility Commission reducing financial incentives for rooftop solar last April .
- ◆ Net Energy Metering 2.0 sunset to NEM 3.0
- ◆ In the event of the electric grid **blackouts and brownouts**, rooftop solar will not power the home unless it is equipped with battery backup.
- ◆ This fall California PUC approved income-dependent billing for electricity.


SOURCES OF INFORMATION

- ◆ US Government
 - ◆ California Newspapers
 - ◆ Periodicals (Popular Mechanics, etc.)
 - ◆ Solar Industry Sources
 - ◆ Leisure Village Neighbors
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CONSIDERATIONS

- **ORIENTATION OF THE ROOF**
 - ◆ My panels face south.
- **AGE/CONDITION OF THE ROOF**
- **SHADING (trees, structures, clouds)**
 - ◆ Changes during the day
 - ◆ Changes from season to season
- **Need to upgrade old breaker panel?**

SOLITICING BIDS - CONSIDERATIONS

- ◆ **20 YEAR LEASE VS. PURCHASE**
 - ◆ **REPUTATION OF COMPANY**
 - ◆ **TYPE OF EQUIPMENT**
 - ◆ **WARRANTY**
- 


DECIDED TO BUY, NOT LEASE

- ◆ 26% federal income tax credit
- ◆ Now 30% tax credit
- ◆ California **income-dependent** tax credit
- ◆ Battery backup?
 - Decided to wait
 - New battery technology
 - Emerging vehicle-to-home technology

TIMELINE - EVENTS

- Signed contract - 1st payment – April 29, 2021
- Leisure Village architectural review May 6, 2021
- City of Camarillo Public Works permit
- Scheduling installation
- Installation & final payment - July 2021
- ✓ Installation completed in one day
- SCE Engineering inspection
- SCE Permit to Operate – Late July 2021

FIRST YEAR EXPERIENCE

- ◆ Electricity cost for one electric vehicle, about 15,000 miles – zero
 - ◆ Maintenance & repair cost for one EV - \$18
 - ◆ Electricity cost for home, including three refrigerators – zero
 - ◆ Net surplus compensation @ \$0.04/kWh \$276.07
 - ◆ End of first year SCE energy credit carried forward (\$251.35)
 - ◆ End of second year SCE energy credit carried forward (\$311.52)
- 

Account Number: 93012-7020
Date bill prepared: 08/12/22

SETTLEMENT BILL

Page 15
Account: A 93012-7020

Account summary

Balance	\$24.11
Used 08/01/22	-\$24.11
Charges	\$0.00
Payments	-\$251.35
Your account has a credit balance.	-\$251.35

This is your 12-month settlement bill

Your 12-month billing period for Net Energy Metering (NEM) is now complete. You do not owe any 12-month settlement charges.

This bill includes your applicable medical baseline allocation.

Summary of your billing detail

Account	Service address	Billing period	Your rate	New charges
	15312 VILLAGE 15 CAMARILLO, CA	07/14/22 to 08/11/22	TOU-D-PRIME	-\$251.35
	15312 VILLAGE 15 CAMARILLO, CA	08/14/21 to 08/11/22	TOU-D-PRIME	\$0.00

-\$251.35

SECOND YEAR SETTLEMENT BILL



Go paperless at www.sce.com/ebilling. It's fast, easy and secure.

For billing and service inquiries
1-866-701-7868
www.sce.com

Your electricity bill

GELFAND, STEVEN / Page 1 of 8

Customer Account
700490300587

Date bill prepared
08/11/23

SETTLEMENT BILL

15312 VILLAGE 15
CAMARILLO, CA 93012-7020

Your account summary

Credit from previous billing	-\$111.41
Credit balance	-\$111.41
Your new charges	-\$200.11
Do not pay. Your account has a credit balance.	-\$311.52

This is your 12-month settlement bill

Your 12-month billing period for Net Energy Metering (NEM) is now complete. You do not owe any 12-month settlement charges.

Your statement includes your applicable medical baseline allocation.

Summary of your billing detail

Service account	Service address	Billing period	Your rate	New charges
8004879728	15312 VILLAGE 15 CAMARILLO, CA	07/13/23 to 08/10/23	TOU-D-PRIME	-\$200.11
8004879728	15312 VILLAGE 15 CAMARILLO, CA	08/12/22 to 08/10/23	TOU-D-PRIME	\$0.00
Billing adjustment				-\$200.11

(14-574)

Tear here

If your contact information has changed please complete the form on the reverse side and return the stub below.

Tear here



Customer account 700490300587

Amount enclosed \$

STMT 08112023 P2 C11 T0263 043720 01 0.4950 C027

15312 VILLAGE 15
CAMARILLO, CA 93012-7020

P.O. BOX 600
ROSEMEAD, CA 91771-0002

700490300587 0000981 00000000000000000000000000000000

Go paperless at www.sce.com/ebilling. It's fast, easy and secure.


SECOND YEAR SETTLEMENT BILL

GELFAND, STEVE

Service account 8004879728 POD-ID
 Service address 15312 VILLAGE 15 101760940002167834
 CAMARILLO, CA 93012

Rotating outage Group N001

Your cost varies by time of day

 Summer cost periods (Jun 01-Sep 30)

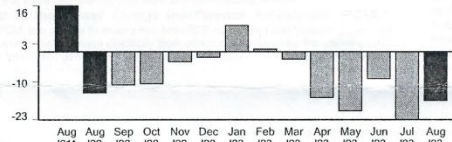
	Weekdays	Weekends & Holidays
On peak	4pm - 9pm	
Mid peak		4pm - 9pm
Off peak	12am - 4pm 9pm - 12am	12am - 4pm 9pm - 12am

Your past and current electricity usage

	Electricity (kWh)	
Summer Season - Consumption		Your next billing cycle for meter 222014-331456 will end on or about 09/11/23.
On peak	65	Consumption is the total amount of electricity imported from SCE.
Mid Peak	23	
Off peak	586	
Summer Season - Net Generation		Net generation is the amount of excess electricity exported to the grid by your generating system.
On peak	-141	Total electricity usage is your system's total net generation minus your total consumption.
Mid Peak	-56	
Off peak	-963	
Total electricity usage this month in kWh	-486	

Your daily average electricity usage (kWh)

2 Years ago: 15.70 Last year: -14.14 This year: -16.76



Your monthly usage may be higher than usual...
 Based on your historical usage pattern, your monthly usage is trending higher than normal. As a result, you may notice an increase in your bill. If you would like information on tips and programs that can help you lower your energy usage and your bill, please visit www.sce.com/billhelper.

* Irregular billing period

Details of your new charges

Your rate: TOU-D-PRIME MED BSLN
 Billing period: 07/13/23 to 08/10/23 (29 days)

Delivery charges - Cost to deliver your electricity
 Basic charge 29 days x \$0.42700
 Medical discount

\$12.38
 -\$3.02
Your Delivery charges include:
 • \$9.36 distribution charges

Your Generation charges include:
 • -\$20.50 power charge indifference adjustment (PCIA)

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TWO YEAR EXPERIENCE

- ◆ Solar array working as expected
- ◆ Can monitor daily & periodic production
- ◆ Panels get dirty – pollen, dust
- ◆ Considering battery backup
 - Expensive
 - Battery chemistry – the holy grail
 - Degrade over time
- ◆ Purchased a second EV

SATISFIED CUSTOMER



IMAGE OF INSTALLED PANELS



QUESTIONS FOR PANEL????

**Please hold your questions until
after the next two presentations.**



SUGGESTED CHECKLIST FOR ROOFTOP SOLAR

MOTIVATION - Why do I want to do this?

WHEN DO I WANT TO DO THIS? Now or wait?

DURATION - How long do I intend to live in or keep this home?

FINANCIAL - Can I justify the cost?

Consider at least the last full year of electric costs.

Note - The solar installation business in California is volatile, due to moving from Net Energy Metering 2.0 to Energy Metering 3.0 last April.

Note - California's electric utilities are set to impose income -dependent fixed charges to monthly electric bills.

BUY OR LEASE? – Suggest consulting an attorney or financial advisor, especially if you are considering leasing.

INCENTIVES - Federal tax credits and tax deductions.

California incentives.

LOCAL ENVIRONMENT –

Orientation- What is the orientation of my roof to the daytime sun?

What is the condition of my roof?

Check with LV Association. When will my roof be replaced?

What shading is there from trees and nearby structures?

Shading will vary, according to time of day and season of the year.

ELECTRIC CAPACITY –

Will I need to upgrade or replace my electric breaker panel? If so, what will it cost?

ELECTRIC VEHICLE - If I intend to power electric vehicle with my solar energy, what will it cost to install a home vehicle charging device?

TYPE of EQUIPMENT - Single inverter or micro inverters?

SIZE OF ARRAY – How many solar panels and the power generation capacity? Will the electric power generation meet my needs?

OPTIONAL BATTERY? – Type, size, warranty, cost and location - outside for indoor.

In the event the battery is involved in a fire, will your insurance policy pay for the damages? Especially for lithium ion batteries.

BIDS - Decide to buy or lease? Note- If you lease, the tax incentives will accrue to the vendor.

CONTRACTORS –

Are they licensed and insured?

How long have they been in business?

Will the company be around when service is needed?

If my installer is no longer in business when I need warranty or other service, who will provide it? Specify this information in the contract.

What is their reputation, e.g., Neighbors, Better Business Bureau, YELP, NextDoor

CONTRACT and DEPOSIT – Suggest you consult your attorney or financial advisor before signing contract.

Contract should specify the installer will remove and reinstall the solar array when necessary (for example, when roof is damaged or replaced) and at a specified cost to the homeowner.

Schedule the Installation and Second Payment to Contractor

Leisure Village Architectural Review Approval - Contractor will submit plan, or homeowner can do this.

City of Camarillo, Public Works Department Permit - Contractor normally submits plan. Public Works will approve the work when it is satisfactorily completed.

Southern California Edison On-Site Inspection of completed work.

Balance of Payment to Contractor

Southern California Edison issues Permit to Operate.

Enjoy your new solar array.

Sources of Information:

<https://www.eia.gov/> US Energy Information Administration



<https://www.eia.gov/special/disruptions/> Energy Disruptions

<https://www.eia.gov/energyexplained/solar/> Solar Energy Explained

<https://www.eia.gov/energyexplained/what-is-energy/sources-of-energy.php> Nonrenewable and Renewable Sources of Energy

<https://www.eia.gov/tools/glossary/index.php?id=E> Glossary of Energy Terms

<https://www.irs.gov/credits-deductions/credits-for-new-clean-vehicles-purchased-in-2023-or-after> Tax Credit for New Clean Vehicles

<https://www.energy.gov/eere/solar/homeowners-guide-federal-tax-credit-solar-photovoltaics> Homeowner's Guide to the Federal Tax Credit for Solar Photovoltaics

<https://www.energy.gov/energysaver/planning-home-solar-electric-system> Planning a Home Solar Electric System

<https://www.energy.gov/articles/getting-most-out-solar-panels> Getting the Most Out of Solar Panels

<https://www.energy.gov/eere/buildings/articles/building-america-success-story-attic-retrofits-using-nail-base-insulated> Attic Retrofit Insulated Panels

<https://www.energy.gov/energysaver/articles/home-solar-installations-things-consider> Home Solar Things to Consider

<https://www.sce.com/customer-service/energy-conservation> Southern California Edison - Energy Conservation

<https://www.sce.com/residential/rates/rate-plan-comparison-tool> Southern California Edison Rate Comparison Tool