



PUGET SOUND SOLAR

Solar Proposal

Prepared for:

Korpela, Nathan - Mercer Island
8441 SE 33rd Pl
Mercer Island 98040

Design consultant:

Roy Foster
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206-947-7312

Our Promise To You

Why take unnecessary risks with your investment? Go with the locally owned company with an unmatched 23-year history of being there for our customers. Our dedicated Monitoring Technician keeps track of your system's performance and our Service Department is ready to honor our Performance Guarantee and Workmanship Warranty, giving you confidence that your system will perform as promised.



Industry-Leading 25-Year Workmanship Warranty

Our skilled technicians have installed thousands of systems since 2001.

We stand behind our installation teams' craftsmanship.

If something's wrong with our work, we fix it.

206-706-1931
www.pugetsoundsolar.com



No BS* 10-Year Performance Guarantee

Advanced solar design tools allow us to predict your annual production.

Your system will meet or exceed its expected performance.

We guarantee it. No BS* (no bad solar).



System Monitoring for 10 Years

Our full-time Monitoring Technician regularly audits all monitored systems.

If your system stops performing or is underperforming, we will know it.

We have a dedicated Service crew.

Puget Sound Solar, LLC
805 Rainier Ave. S.
Seattle, WA 98144

The Big Picture



This is a Win-Win

It is a rare thing when a prudent investment intersects with a tangible environmental benefit!



Reduced Carbon Footprint

Your solar array reduces your carbon footprint no matter where you live. It's "all hands on deck" to achieve zero carbon.



Invest in Your Future

Solar not only pays for itself but also protects against future rate increases & adds value.



Your Picture

Without Solar

Cost of Electricity Now
\$834/year for 6346 kWh

Cost of Electricity in 10 Years
\$1235/year (rising 4%/yr)

Carbon Offset
0 tons per year

Solar Powered

Cost Of Solar over 25 Years
\$768/year for 6346 kWh

Cost of Solar if Financed
N/A

Carbon Offset
4.95 tons CO₂ per year

...and if you have an

Electric Vehicle

Solar EV Driving Distance
20940 miles/yr @ 3.3mi/kWh

Solar EV Cost per Mile
3.7¢/mi vs gas 11.8¢/mi @ 25mpg

Carbon Offset
10.26 tons CO₂ per year



Photovoltaic System Quotes

Korpela, Nathan - Mercer Island

11/18/2023

Quote valid for 30 days

Equipment

	Option 1: 5.74 kW	Option 2: 9.84 kW				
	14 Silfab-USA 410W 21.4% efficient, made in WA Black frame, black backing All flush, black hardware	24 Silfab-USA 410W 21.4% efficient, made in WA Black frame, black backing All flush, black hardware				
Inverter(s)	14 Enphase 300W micro	24 Enphase 300W micro				

Energy Production

	3707 kWh/yr	6355 kWh/yr				
Estimated Annual Output	3707 kWh/yr	6355 kWh/yr				
Typical electric usage offset	0.4 average homes	0.7 average homes				
Module warranties: Prod/Output/25yr	25 / 30 / 90.8%	25 / 30 / 90.8%				

Cost and Credits

	\$19,655	\$26,530				
System Price	\$19,655	\$26,530				
Dollars per Watt	\$3.42	\$2.70				
Sales Tax	N/A	N/A				
Grand Total	\$19,655	\$26,530				
30% Federal Tax Credit	(\$5,897)	(\$7,959)				
Net Cost After Taxes & Credits	\$13,759	\$18,571				

Net Metering

	(\$5,861)	(\$10,048)				
Net-Metering Total, first 10 years*	(\$5,861)	(\$10,048)				
Cash-Purchase Balance at 10 years	(\$7,897)	(\$8,523)				
Cash-Purchase Balance at 25 years	\$6,016	\$15,328				
Payback Time	19.4 years	16.4 years				

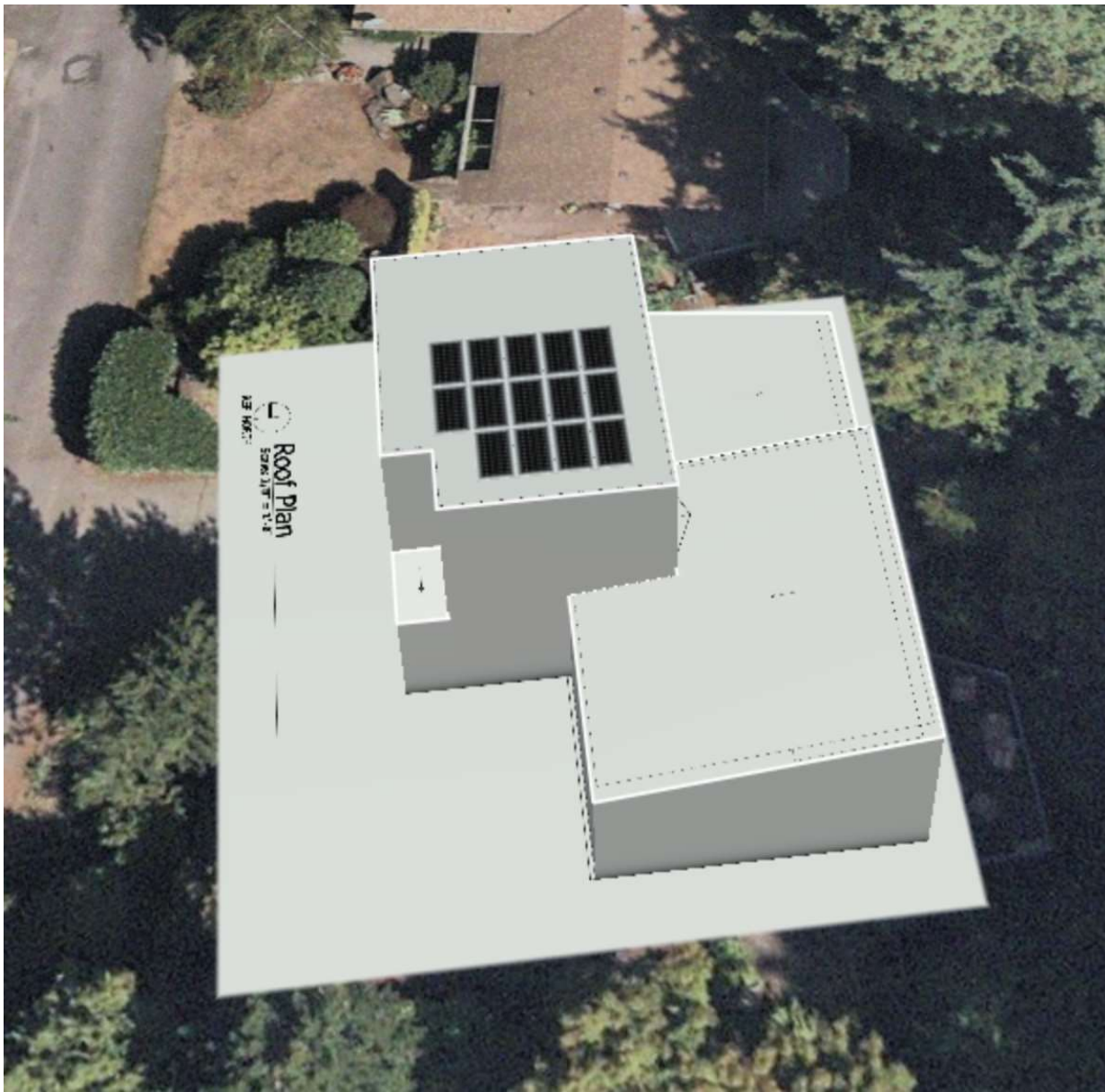
Value of Solar Energy Over the Next 25 Years (see graph)

	15.42¢ per kWh	12.14¢ per kWh				
Levelized Cost (Cash Purchase)**	15.42¢ per kWh	12.14¢ per kWh				
Financed Purchase (see below)	N/A	N/A				
rs Cost of Electricity from Utility	13.1¢ rising to 35.0¢	13.1¢ rising to 35.0¢				

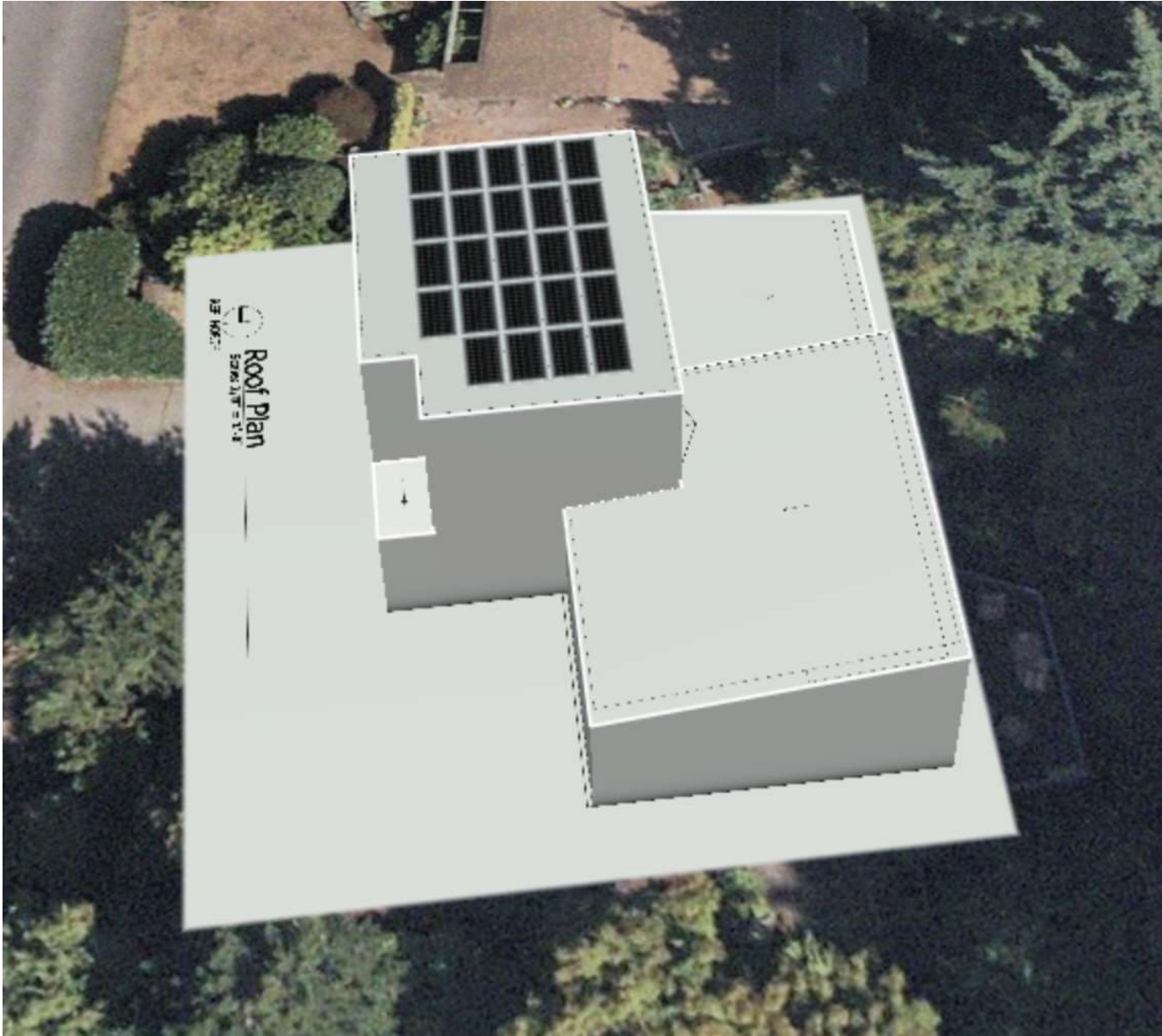
* Net Metering is the amount you save on your electrical bills if you install a PV array. It is calculated using a mixture of Tier 1 and Tier 2 rates depending on array size and usage.

Assumptions: 1.) Constant usage & production within a season. 2.) 74% of PV production occurs in Apr-Sep. 3.) 4% annual utility cost escalation.

** This is what you pay for each PV-generated kWh instead of buying it from the Utility. Calculated as (Net system cost after taxes & credits) / (Total kWh produced) over 25 years.



Option 1



Option 2

Customer

(none)

Designer

Julie Wilcox

Organization

Puget Sound Solar

Address8441 SE 33rd Pl
Mercer Island, WA 98040,
USA**Coordinates**

(47.581014, -122.224580)

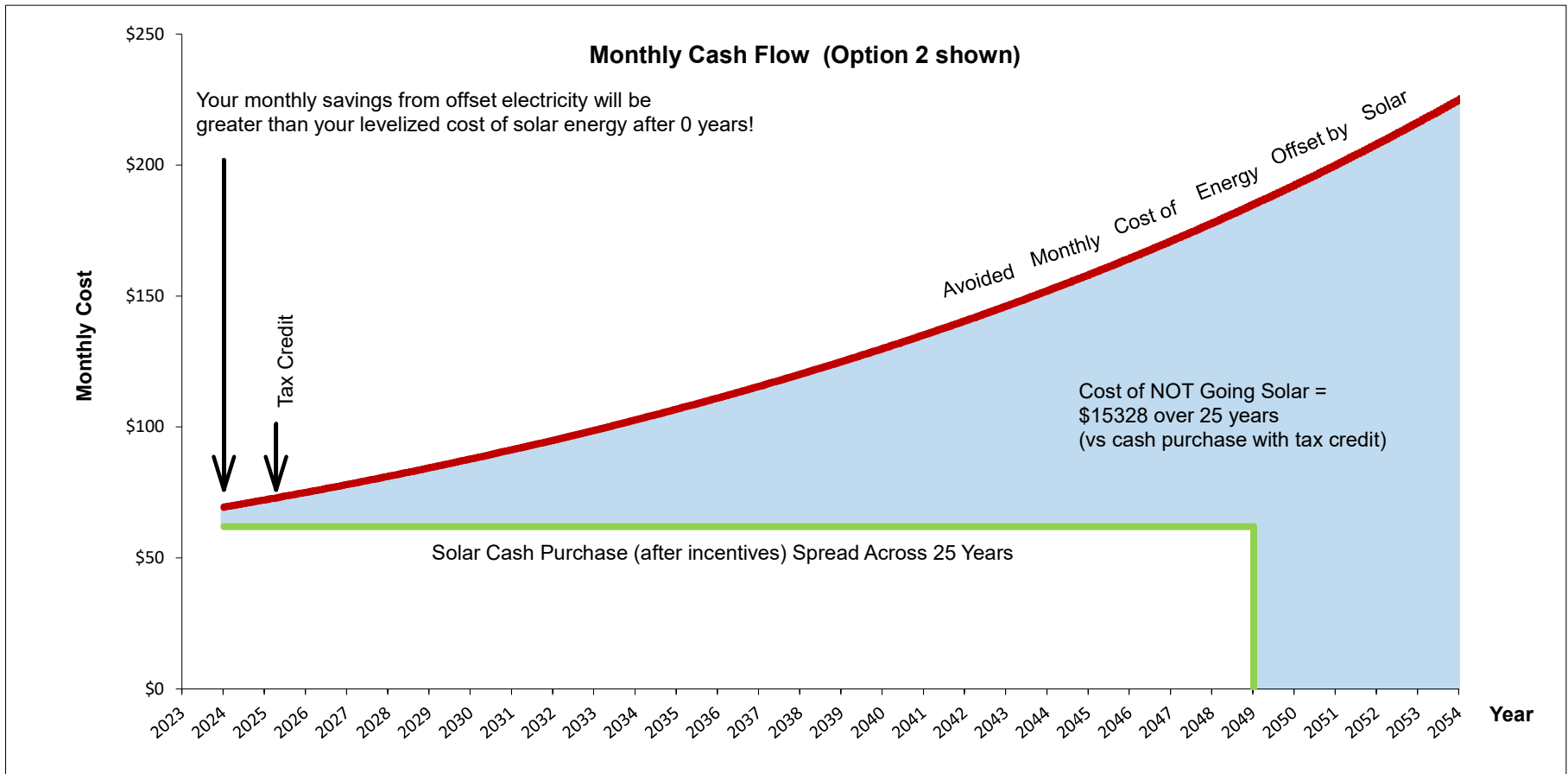
Date

16 November 2023

Annual irradiance

Summary

Array	Panel Count	Azimuth (deg.)	Pitch (deg.)	Annual TOF (%)	Annual Solar Access (%)	Annual TSRF (%)
1	27	262	7	88	65	57
2	24	352	7	81	75	61
3	12	82	7	85	54	46
Weighted average by panel count	-	-	-	-	66.9	56.6



*The monthly cost of energy shown here is not the whole bill. It's the portion that would be offset (eliminated) by Solar production.

FINANCING EXAMPLES

	Option 1	Option 2			
Cash purchase					
Loan Amount	\$0.00	\$0.00			
Amount due at installation	\$19,655.00	\$26,530.00			
Tax credit rolled into principal	N/A	N/A			
Monthly payment	N/A	N/A			
minus average monthly Net-Metering	N/A	N/A			
= Effective Monthly Payment*	N/A	N/A			

*This is the monthly loan payment amount minus average monthly net-metering savings over the first ten years. If it's negative, you're cash-positive.

Project Specifics

SYSTEM CONFIGURATION - OPTION 2

- 24x Silfab-USA 410W modules (9.84 kW) + Enphase inverters
- Generate ~6346 kWh/year at 12.14¢ per kWh; offset usage of 0.7 average homes
- Silfab mods - made in Washington, 25yr product warranty; outstanding 30yr power guarantee.
- Enphase microinverters are imported and carry a 25-year warranty.

ESTIMATION PROCESS & ASSUMPTIONS

- This estimate is a ballpark based on aerial imagery
- We will provide firm quotes once we've been to your site
- Production estimates based on historical performance data
- Prelim quote may not include necessary electrical upgrades

INCLUSIONS/JOB SCOPE

- System design and consultation
- Turn-key code compliant solar system
- All necessary permits
- System commissioning and final walk-through
- Formal production report at one year
- Ongoing production review/diagnosis for 10 years
- 25 year workmanship warranty

EXCLUSIONS

- Systems without battery storage turn off during outages

FEDERAL TAX CREDIT

This is a dollar-for-dollar reduction in your tax liability. You can use this benefit as long as your tax liability over the course of a few years exceeds the credit amount.

NET METERING

The Net Metering Agreement is a contract with your utility which allows you to reduce your electric bill. When you produce more kiloWatt-hours than you consume, the utility meter runs backward. Excess energy produced in a summer billing period is credited to your account and can be used to reduce your electric bill in winter.

DISCLAIMERS

Consult your tax advisor regarding your ability to receive the federal tax credit. Net metering law can be amended and you may have no recourse. Product warranties may become void if the manufacturer goes out of business.

SOLAR ACCESS ESTIMATES

We are assuming:

75% solar access on Surface #1 facing North (~646 kWh/yr per kW)

Glossary

ARRAY

A collection of panels. For example, a house might have two arrays: ten panels facing East in one group and eight facing West in another.

INVERTER

These are the brains of the system: they "invert" the DC power produced by the panels to AC power that directly matches the power coming from your utility. The inverter is also how your system communicates production data to the internet.

KILOWATT (kW)

1,000 Watts. This is the product of Volts and Amps and it is the measurement of power. Example: A hair dryer uses about one kiloWatt.

KILOWATT-HOUR (kWh)

The unit of energy we reference when talking about how much your system produces, or how much your home consumes. One kWh is simply 1000 Watts produced or consumed over one hour. Example: A hair dryer running for one hour uses one kiloWatt-hour of electricity.

NAMEPLATE OR DC RATING

This is simply the nominal rating of a system. If a home has ten panels rated to 300 Watts each, it is a "3000 Watt" or "3 kW" system... regardless of location or the amount of sunshine or shade it encounters.

SOLAR ACCESS

The amount of sunlight a given point receives annually, expressed as a percentage. 70% solar access means the site receives 30% less light than it would if there was no shade. This is weighted to reflect our cloudy winters and sunny summer. Solar Access may be estimated via computer models or measured directly using an electronic tool called a SunEye.

SOLAR PANEL

Also called a module, these are comprised of 60-96 solar cells and are the building blocks of a solar system.

SUN-HOURS

This index provides an objective way to compare the amount of sunlight received in different parts of the world. It converts the annual total into an equivalent average daily duration of full sun exposure (1000 Watts/square meter). Seattle, for example, has 3.7 sun-hours, while L.A. has 5.6.