
Community Solar

August 2019

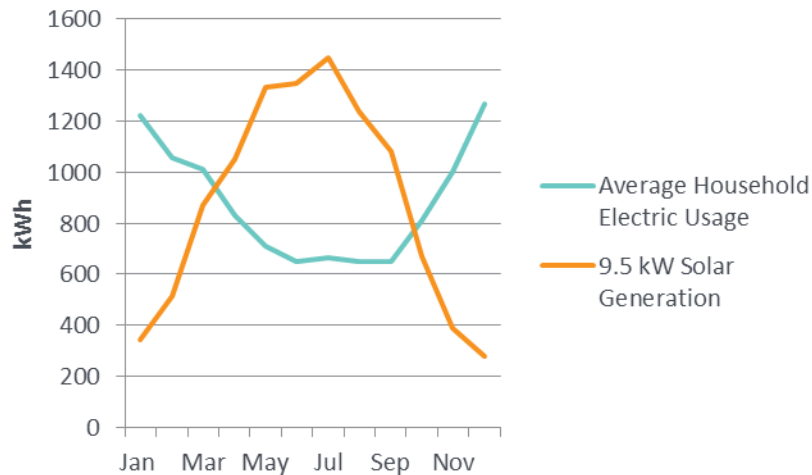


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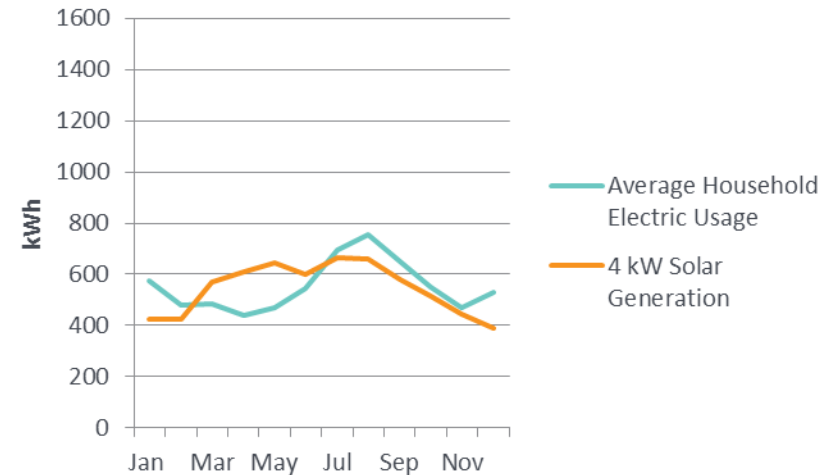
Solar in the Pacific Northwest

The grid is a key component of making solar work in the Pacific Northwest because seasonal shifting is necessary to serve winter heating load.

Illustrative PSE Residential Electric Consumption vs. Solar Generation



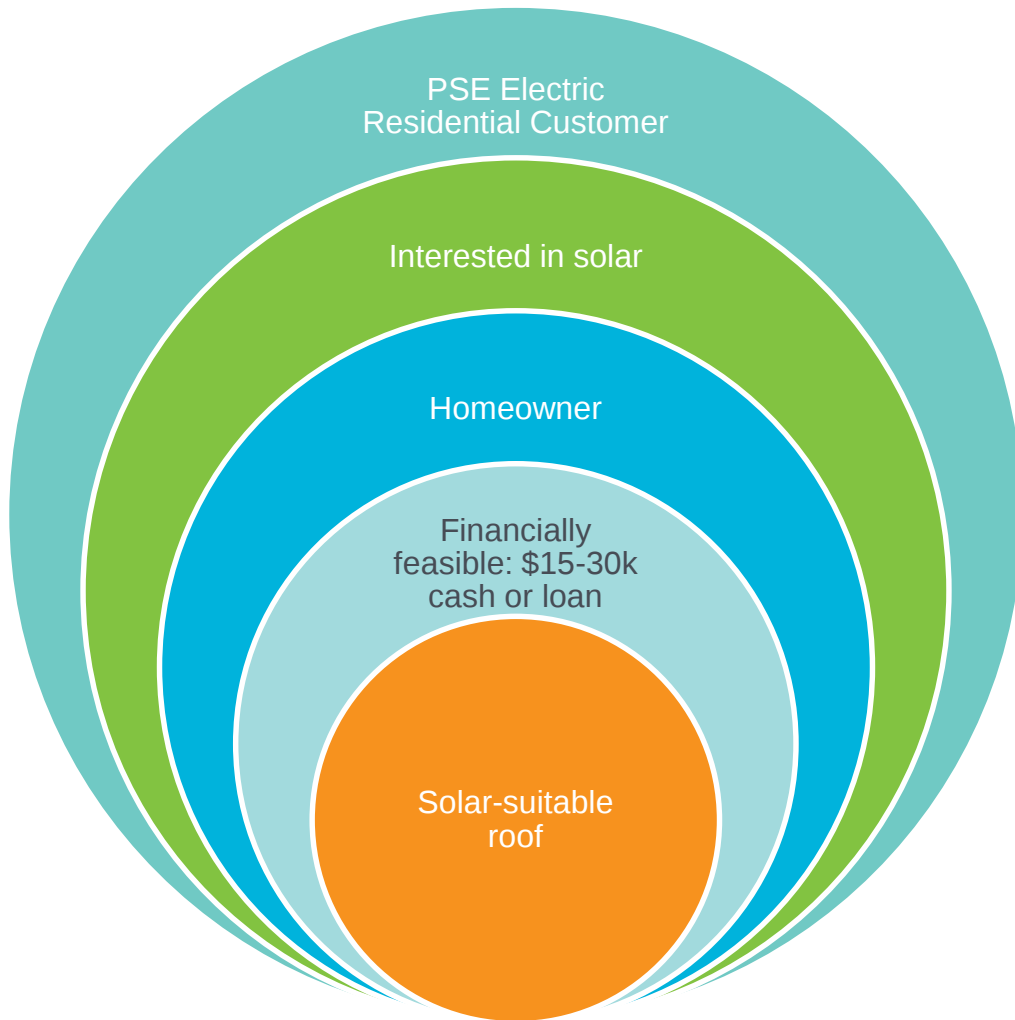
Illustrative CA Residential Electric Consumption vs. Solar Generation



Source notes:

- 1) PSE electric consumption based on Sch. 95 filing effective 7-1-2019. Weather-normalized 2020 forecast for residential customers
- 2) WA solar generation data for Bellingham from PVWatts. System sized to match annual household consumption.
- 3) CA household usage based on average EIA residential sales and customer counts for 2013-2018
- 4) CA solar generation for Los Angeles from PVWatts. System sized to match annual household consumption.

Customers face multiple barriers to solar access



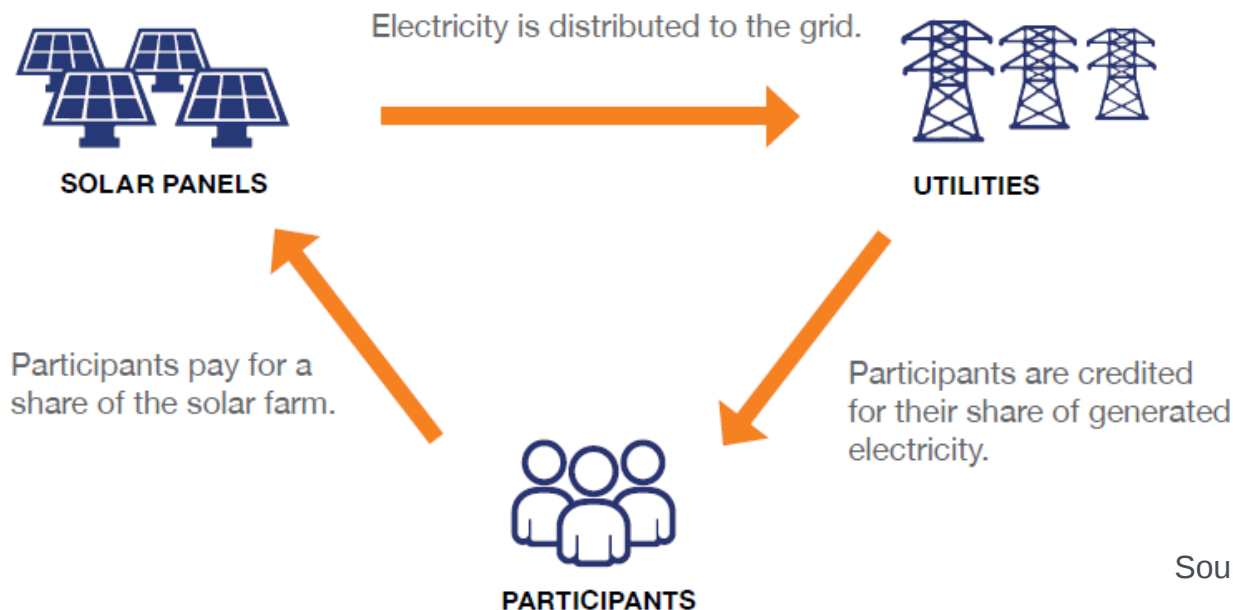
Q: How can PSE help make solar accessible to any customer that wants it?

A: Solar Choice removes some barriers. Community solar may be an option to further expand access.

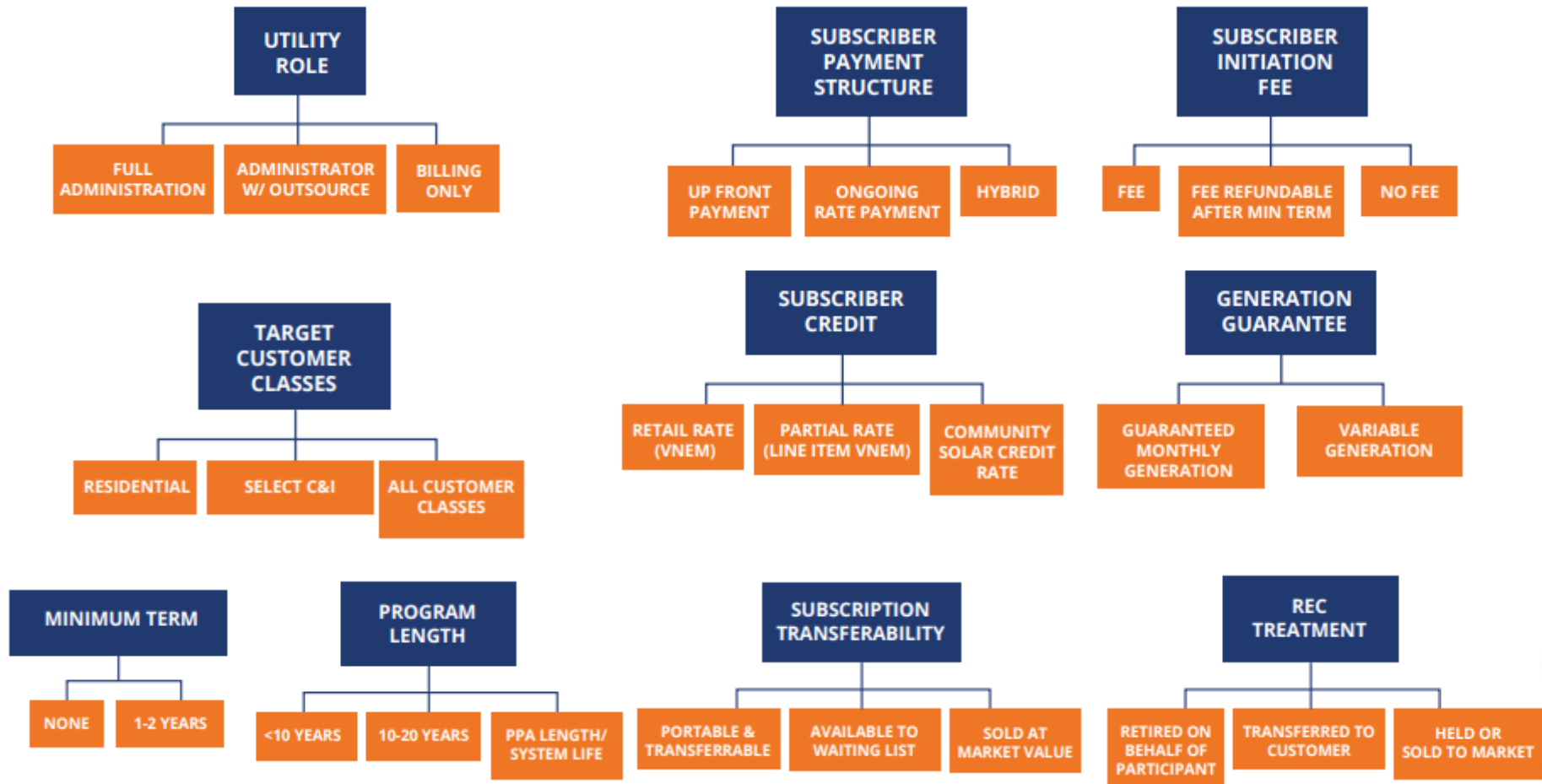
So what is community solar?

Solar Electric Power Association considers utility-involved community solar a business model with three defining elements:

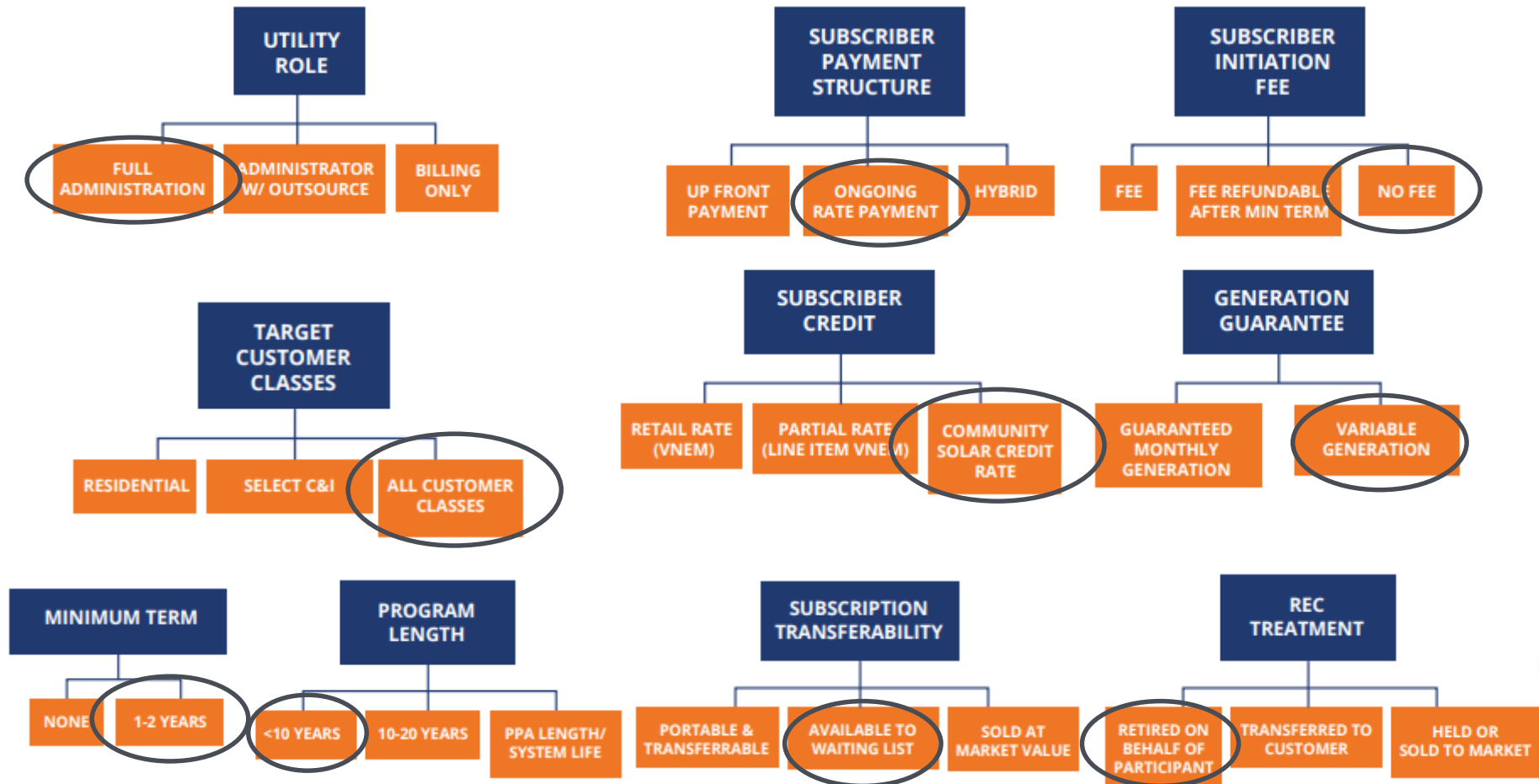
1. a group of participants voluntarily pay for a share of a solar array that is located external to their properties;
2. the electricity produced flows into the electric grid; and
3. the subscribers receive benefits for the electricity produced by their share of the solar array.



SEPA's community solar decision tree



PSE's current vision



PSE's approach to Community Solar

PSE Community Solar definition

- Local (in PSE's service territory)
- New solar capacity, RECs retired on behalf of participants
- Portion benefits low-income customers
- Subscription tied to a particular project - no upfront buy-in
- Monthly financial commitment from subscribing customers, offset by avoided energy credits. No cost to non-participants.

Opportunities

- Removes barriers to participation in solar
- Provides an option for customers to directly support clean energy without shifting costs onto non-participants
- Provides “additionality” benefit - drives new, local generation

Challenges

- Current solar prices dictate a premium product rather than a credit
- Siting challenges -- species protection, land cost, permitting, etc.

Mutual benefits for PSE and customers

Benefit to PSE:

- Facilitate the transition to clean energy without placing undue cost burden on ratepayers.

Benefit to customers:

- Provide a mechanism whereby customers with barriers to rooftop solar can share in the costs and benefits of solar power.
- Feel a sense of ownership over a particular portion of the solar array.
- Feel a sense of pride in circumstances where solar is visible in the community.

Next steps and timeline

- 2019
 - Identify sites that could host community solar
 - RFI to identify possible local host sites slated for Q3 2019
 - 5 MW project in Kittitas County with reserved state incentives
 - Refine pricing estimates based on sites
- 2020
 - Solicit developer bids for selected local host sites
 - Seek regulatory approval for community solar program
 - Build IT and billing infrastructure
 - Launch marketing and enroll participants
 - First solar project(s) operational

Appendix
