



Community Solar Follow up Questions

Frankfort Plant Board
April 28, 2022



Common ways of investing in community solar while taking advantage of investment tax credit (ITC)

1. Through a power purchasing agreement (PPA) with a private developer.
 - With this financing format, the developer captures the 30% federal Investment Tax Credit (ITC) available for solar projects.
2. The utility company develops a project on behalf of a group of subscribers who collectively form a limited liability corporation (LLC) to own the solar facility.
 - The subscriber-owners would contribute funds to the LLC in proportion to their ownership interest in the capacity and energy of the solar facility, and they could then claim the federal ITC equal to 30% of the value of their share of the facility.
 - The foremost issue is that the ability of the subscriber-owners to claim the ITC on a share of a collectively owned installation has not been formally established by the Internal Revenue Service (IRS).

Community Solar Projects that Took Advantage of ITC

- **Bayfield Electric Cooperative**

- The solar garden is funded entirely through subscriptions. Bayfield Electric at one point explored a PPA but decided that it would be too complicated. The community solar facility is funded by customers who want the solar option.

- **Dunn Energy Cooperative**

- PPA with SoCore Energy. Dunn Energy did not contribute any upfront capital.

- **Eau Claire Energy Cooperative**

- Eau Claire Energy utilized a tax-equity flip structure. The utility formed an LLC and worked through a tax-equity partner, which allowed them to monetize tax credits. The LLC owns the array and Eau Claire Energy has a PPA with the LLC. Under this arrangement, Eau Claire is essentially paying itself for electricity generated.

- **New Richmond Utilities**

- New Richmond Utilities/WPPI Energy (wholesale power supplier) has a PPA with the third-party developer partner, SunVest Solar, Inc. WPPI Energy intends to assume ownership in year seven once the benefits of the federal ITC and Modified Accelerated Cost Recovery System (MACRS) are realized.

- **St. Croix**

- St. Croix worked with the National Renewables Cooperative Organization (NRCO), which acted as the tax-equity partner and third-party owner. NRCO put up 50% of the cash required to construct the project, and St. Croix made up the remaining 50% through customer subscriptions.

What level of initial participation (as in % of project) can utilities expect to get? At what % participation should a utility move forward with the project?

- Based on a Study of 9 community solar projects
- The Average Participation Rate prior to launching the project averages at 59%.
- 20% being lowest.
- 100% being the highest.
- This is often dependent on the community interest gathered from the community surveys and the number of residents residing in the area.
- Higher number of residents result in higher participation rates.
- We recommend the program should be at least 50% subscribed to move forward with construction

If a customer has bought in under the “ownership” model with an upfront payment, what happens if they move? Or just want to leave the program?

- The contract terms varies by States, and individual Utility companies
- There is vary low regulation when it comes to community solar projects contracts
- Some states require full disclosure on certain contract terms such as termination

Contracts Reviewed include terms such as:

- Customer may, with the prior written consent of Utility, (i) change the Service Address for which the Production Credits will apply to another Service Address within Utility’s service territory for which Customer is obligated to pay Utility for electric service , or (ii) assign this Agreement to another individual or entity provided such assignee’s Service Address is located within Utility’s service territory, pursuant to a Transfer and Assignment Agreement in the form attached hereto as Appendix A. Customer must request Utility’s consent of any such proposed change or assignment in writing at least 30 days prior to the proposed effective date of such change or assignment.
- Existing customer shall execute the Solar Cancellation/Transfer Form and the customer’s transferee shall be required to execute a separate Customer Community Solar Service Agreement prior to the transfer being accepted by the City.
- In the event of Solar Cancellation, if the Customer has purchased solar panels, City may, in its sole discretion, repurchase the panels from the Customer at a rate established in Hastings City Code Section 32-305. The Customer shall surrender all right, title, and interest in and to this Agreement upon the cancellation/transfer of this Agreement.



If a customer is paying in on a monthly basis under the ownership model, what happens after the 25-year life of the contract if the facility is still operating?

- **Renewal:** If Subscriber Organization is in compliance with the terms of this Agreement, it will have the option to renew for up to 10 years in two 5-year renewal periods (“Renewal Period”). Company will send Subscriber Organization a renewal notice three (3) months prior to the expiration of the Initial Term.
- Certain Communities offer clients the opportunity to renew ownership contracts a few months prior to the contract fulfillment date.
- In general, the new contract will be for a significantly shorter-term while taking into consideration the expected life span of the panels.

What is the regional/state precedent for reserving a portion for low-income customers? What is an appropriate amount to discount?

- “Less than half of U.S. community solar projects have any participation from low-income households. Of projects that do include lower-earning families, only about 5 percent involve a sizable share, or more than 10 percent, according to a November 2018 survey.”
- Carveouts vary by state, and by individual Utility companies.
- Most states do not require that a portion of low-income panels be reserved for low-income customers.
- The average carve out percentage ranged from 0% to 50%, the average ranging between 10% and 20%.
- **The discount rate is determined by many factors Such as:**
 - State grants and subsidies.
 - Overall project costs.
 - Community Solar farm size.
 - The median income in the area
- Most Utilities provide multiple affordable payment options to aid low-income users, most commonly pay as you plans have proved to be very effective, some plans charged as low as \$4 per month for a 20-year term.
- Utilities have also adopted waiving any start up fees as well.
- Some utilities provide an additional fixed Kw credit in addition to the customer’s subscription for free thus lower the customer’s overall utility bill.

What is the best approach to create and measure a community's interest in community solar?

The best approach to measure community interest are:

- Community surveys
- Television ads
- Other traditional forms of marketing such as news papers and radio
- Public presentations at local universities, public markets
- Flyers
- Most companies combined an array of marketing strategies to gage the interest of their target audience



1898  CO SM

PART OF BURNS  MCDONNELL