Project Name:

COYOTE RIDE COMMUNITY SOLAR FARM

Leaseback and landfill location for community solar

Size:
1.95 MW_{AC}

Location:
5887 S Taft Hill Rd, Fort Collins, CO 80526

# of LMI customers:
140 households

Project Website:
https://pvrea.coop/mylocalsolar and https://pvrea.coop/pvforall

BEST PRACTICES

- Tax equity investment (leaseback with CoBank)
- State grants

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Overview

The 1.95 MW Coyote Ridge Community Solar Farm was developed in Larimer County, Colorado by the Poudre Valley Rural Electric Association (PVREA), an electric cooperative deeply dedicated to renewable energy. PVREA directs the PV for All Program, which provides solar power to 140 low-income households in Larimer, Boulder, and Weld Counties in Northern Colorado. Developed on an active landfill site, the project diversifies its subscriber base by allocating 700 kW to income-qualified households, 500 kW to nonprofits, and the remaining 750kW to all other community solar subscribers.

Coyote Ridge is one of eight Low-Income Community Solar Demonstration Projects administered by the Colorado Energy Office (CEO). This project is the largest demonstration project in Colorado and was energized in 2017. CEO provided project evaluation and funding support, and a partner organization, GRID Alternatives (GRID), provided the design (single-axis tracking), the implementation framework, the installation, and "behind-the-meter" equipment. GRID also provided labor, a workforce training program, and outreach and communication support. PVREA obtained leaseback financing for the project, then moved forward with land acquisition and interconnection. PVREA handles the program administration and overall project control and operations, including subscription, outreach, billing, and software.

The total project cost was $2.6 million. CEO covered $200,000 of the cost through

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a grant and PVREA financed the remaining portion. Direct project costs consisted of operational costs (such as equipment, construction materials and GRID staff time), outreach, and administration. Operations accounted for approximately 96% of total project costs, while outreach and administration accounted for approximately 1% and 3% of project costs, respectively.

General service members signed up for community solar panel subscriptions online, and they were enrolled on a first come, first served basis. For this group, PVREA's goal was to cover up to 120% of each household's electricity usage, but it was up to the member to decide how many panels to subscribe to up to that limit. Panels were subscribed with an upfront fee of $48/panel with the ability to split that payment into 24 payments of $2/panel for two years. There is also an ongoing monthly subscription fee of $3.46 per panel. The initial subscription agreement was for 20 years, but members could opt out any time. Panels were estimated to generate about 475 kWh each per year. Non-profit businesses have the same project process and costs as the general service members.

Income-qualified residential members applied for a portion of the solar garden through PVREA's PV for All program. Income guidelines vary by county and the number of people in the household. There are no upfront or ongoing subscription fees for this group, they only receive production bill credits for the amount of energy their subscribed panels generate. Members in the program saw immediate savings of approximately 30% on the energy portion of their bill due to production bill credits. The participation period for this group is capped at four years. Members can renew but need to reapply.

More information on the program can be found in the myLocal Solar Guidebook.

Innovative Approaches

- Leaseback structure with CoBank. To cover the significant costs of the project, PVREA reviewed various financing models including a tax equity flip, tax advantage lease, leaseback, direct loans, and Clean Renewable Energy Bonds (CREBs) from the Department of Energy. However, after significant review PVREA decided to do a leaseback structure with CoBank, a co-operative bank which offered a

12-year term length. CoBank is a taxable entity with a tax equity inventory so PVREA through CoBank was able to take advantage of all the tax benefits (Investment Tax Credit and Modified Accelerated Cost Recovery System) through the leaseback structure.

- "Barn-raising" community development model. The project was implemented using this model where more than 300 volunteers spent nearly 3,200 hours building the array.

- Siting on an active landfill. The project is located on approximately nine acres of land leased from Larimer County. Due to being over five acres of impacted area, the project was required to complete a special permit application. This required extensive assessment of environmental and social impacts, but the Larimer County Landfill had already completed similar analysis for landfill activities, so permitting was manageable. The landfill provided access to unused land in an area where other large tracts would have been prohibitively expensive and gained community support.

- PVREA worked around production restrictions. Under contractual requirements, all production from the project must be used on the local distribution system - no excess energy can back feed onto the bulk electric transmission infrastructure. To meet this requirement, PVREA sited the project in an area with adequate and growing electrical load.

Lessons Learned

- The shared splitting of costs allowed the project to reach both income-qualified and general service residential subscribers as well as non-profit businesses. By splitting the project into those three groups, optimizing the financing mechanism, and utilizing a grant from the Colorado Energy Office, PVREA was able to achieve a positive net present value for the Coyote Ridge Community Solar project.

This case study is a part of the LIFT Toolkit initiative. To explore more case studies and best practices visit LIFT.Groundswell.org
research@groundswell.org