



PUBLIC HOUSING AGENCY OF THE CITY OF SAINT PAUL OFF-SITE COMMUNITY SOLAR GARDEN SUBSCRIPTION AGREEMENTS

PROJECT INFORMATION

The Public Housing Agency (PHA) in St. Paul, Minnesota provides affordable housing for low-income individuals and families throughout the city. Established in 1977, the PHA owns and manages 4,274 rental units in St. Paul, which are located in hi-rise buildings, townhouses, duplexes and single-family residences. Through both its public housing and Section 8 Housing Choice Voucher programs, the PHA is providing affordable housing to more than 21,000 low-income residents.

Committed to sustainable and green initiatives, the St. Paul PHA recognized the opportunity to participate in community solar created by the Minnesota State Legislature in 2013. In 2014, the agency issued a request for proposals and ultimately signed 25-year subscription agreements with project developer Geronimo Energy. These off-site community solar projects – also known as community solar gardens – are now owned and operated by BHE Renewables and were developed by Geronimo Energy. Over the 25-year term, the PHA estimated that it would save more than \$3 million in electricity costs - or \$130,000 per year - and its community solar garden subscriptions would offset 100 percent of the energy use at 10 of its hi-rise buildings and its main administrative building.

PARTNERSHIP

The St. Paul PHA did not partner with outside organizations, but they did hire an engineer and an energy specialist to review the proposals. The PHA's legal team, procurement department and finance team worked with Geronimo Energy and its attorneys to execute the subscription agreements.

PROJECT BENEFITS AND VALUE

The PHA's community solar subscriptions have reduced its utility costs significantly and contributed to the PHA's mission. Over the 25-year contract term, the agency will save approximately \$3 million and the power produced under its subscriptions is enough to offset the energy consumption in 10 of its hi-rise buildings and its main office building.

MOTIVATOR

The primary motivator behind the community solar subscription agreement was the agency's desire to follow its green initiatives. The energy cost savings were a secondary, yet important, driver and the PHA has been able to use those cost savings to fulfill its overall mission of providing affordable housing for low-income residents.

POLICY & MARKET CONTEXT

Implemented in 2014, Minnesota's program generated significant interest in community solar. The interconnection bottleneck that resulted from the initial flood of community solar applications and a June 2015 decision to limit co-located projects to 5 megawatts (MW) – and later to 1 MW – led to uncertainty for investors. For PHA, the new cap on co-located projects also meant renegotiated contracts and a smaller portfolio of subscriptions.

The PHA's community solar garden subscriptions are credited at Xcel's retail electricity rate, meaning that solar power produced by the community solar projects offsets energy use at a 1-to-1 ratio. In 2016, the state adopted a value of solar rate which bases the value of the credit

on some of the benefits that solar provides to the utility, grid and society. The new credit rate went into effect in 2017 and is updated annually. Because the PHA signed its subscription agreements before the new rate was implemented, it was able to lock in the retail value for its subscriptions throughout the 25-year term, bringing a valuable level of predictability to the organization's electricity bills.

INCENTIVES & FINANCING

The St. Paul PHA owns its properties but they are regulated by the U.S. Department of Housing and Urban Development (HUD). Because HUD largely funds operations at PHA properties, any reduction in utility costs would result in the PHA receiving less money for utilities, thereby eliminating any local incentive to seek out utility cost savings. HUD's Rate Reduction Incentive (RRI) program was designed to encourage energy cost saving measures by allowing public housing agencies to retain a portion of the savings. To take advantage of the RRI, the agency applied to its local HUD field office and was awarded the incentive.

Under the subscription agreement, the PHA was not required to make an upfront payment. With no upfront cost, the agency was able to realize immediate utility cost savings by paying less for the power produced through its subscription than the utility rate it would have otherwise paid.

GREATEST CHALLENGES

The St. Paul PHA encountered two major challenges. The first was related to the length of the community solar contract term. The 25-year contract term required the PHA to get approval from a local HUD Field Office before they could proceed with the subscription since it exceeded five years, the contract length allowed by HUD without special approval. To get approval from HUD, the agency had to prove that there was no other practical means of achieving the utility cost savings and the environmental benefits of the 25-year contract term. The PHA sent a letter to HUD which included its analysis of the benefits of the subscription agreement and rationale for determining that there were no other practical alternatives. Ultimately, HUD approved the 25-year contract term.

The second challenge was having to navigate the changing community solar rules after the PHA had entered into its initial community solar subscription agreements in January 2015. Five months later, the Minnesota Public Utilities Commission changed the rules related to co-location which involves siting multiple projects at one site. The new rules limited co-located projects to 5 MW through September 25, 2015, and then lowered the cap to 1 MW beyond that. In addition to lowering the PHA's subscription capacity and reducing its utility cost savings, the co-location restrictions meant that the agency had to renegotiate all 25 of its contracts with Geronimo Energy.

TENANT BENEFITS & ENGAGEMENT

The agency's tenants do not receive direct benefits from the community solar subscriptions, but the resulting cost savings from the subscriptions are applied toward ensuring that the PHA continues to provide quality, affordable housing to its residents.





