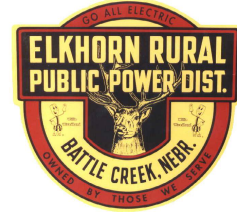


# Solar Power Offsets Peak Summer Power Demand in Nebraska

ERPPD enlisted SunVest Solar to build, own, and operate three community solar gardens with a combined capacity of 6.5 megawatts.



Tom Rudloff, General Manager of Elkhorn Rural Public Power District (ERPPD), had a few reasons to investigate solar. ERPPD works with Nebraska Electric Generation and Transmission Cooperative, Inc., and per their contract have the option to receive a portion of their annual power needs from renewable energy. ERPPD already has a diverse supplied energy mix, but with a high irrigation load peaking in the summer, they thought solar could be a way to offset some of the power demand. The second reason was to gauge the financial benefits.

"Reliability is a top priority," Rudloff said. "With the changing times and technology, in the future, we will need to adapt our energy mix."

ERPPD enlisted SunVest Solar as part of a project to get more experience in solar power. Rudloff and his team designated three areas within their district to place community solar gardens. SunVest was originally set to build, operate, and maintain the solar arrays. SunVest was working with a third party to secure project financing, but when the third party backed out, SunVest stepped in to secure financing to make the project possible.

## A LONG-TERM PARTNERSHIP

"That was a big deal to us. SunVest has been a good partner," Rudloff said. "When we first started looking at sites, SunVest worked with us and our customers to lease land for the solar sites. Leasing land for solar is a revenue stream for some folks out there, and they were excited to have the opportunity to lease their grounds for this project."

## SUMMARY

ERPPD enlisted SunVest Solar as part of a project to get more experience in solar power.

The energy cooperative was looking to offset a high irrigation load peaking in the summer and they were looking to gauge the financial benefits of solar.

## SOLUTION

- 3 community solar gardens with a combined capacity of 6.5 megawatts.
- Bifacial modules
- Single axis trackers follow the sun and adjust in response to weather conditions

## BENEFITS

- Enough power for 1,300 average homes.
- Purchase of local power for less than the cost of importing other renewable energy from out-of-state resources.
- A good investment for the future of ERPPD customers.

SunVest financed the project, built the solar array, provides maintenance, and sells the locally produced power back at a rate that is attractive to ERPPD. SunVest will continue to own and operate the systems as part of a 20-year power purchase agreement.

The sites have a combined ability to produce up to 6.5 megawatts per year. According to the U.S. EPA, 6.5 megawatts is the equivalent of the average electricity usage for about 1,200 homes per year. Individual system sizes varied depending on substation and distribution line capacity and local power consumption.



#### A LONG-TERM PARTNERSHIP

Portions of each array use bifacial modules, which produce solar power from both sides of each panel. Panels were installed on single axis trackers from Array Technologies Inc., which follow the sun and adjust angles in response to weather and site conditions. When panels can move with the sun, they are exposed to more photons per surface area, and in some cases, can collect 30% more power than a fixed panel.

"The community solar gardens allow ERPPD to buy local power from SunVest for less than the cost of importing other renewable energy, such as wind and hydropower, from out-of-state sources," said Tim Polz, Vice President of SunVest. "In fact, for the first time, renewable energy is cheaper than coal-produced power."

*"We wanted stable costs to add to our purchasing contracts and would provide experience in the renewable markets," Rudloff said. "We feel we made a good investment in the future for our customers. It is one that will save them money while learning about renewable energy."*

