

**Who we are** – Power Up Winona *Community Solar* is a newly formed group of citizens and institutions, seeking to commission a one megawatt (1MW) solar electric array in the Xcel billing area of Winona County. We have received a \$3500 CERTs (Clean Energy Research Teams) seed grant to help research roles local institutions can play in community solar. If your establishment wants to reduce its reliance on fossil fuels, help the Winona community gain access to clean energy, and participate in a transformation to distributed energy, join our exploration.

What is Community Solar – Many states are already participating in community solar programs, including, Arizona, California, Colorado, Connecticut, Massachusetts, Maryland, Oregon, New York, North Carolina, New Mexico, Utah, and Washington. Combined these states have installed more than 52 MW in over 40 community solar projects, with many more in progress.

In Minnesota, the legal groundwork was established by the 2013 MN legislative session. A community solar project may be up to 1000 kW in size (or 1 megawatt), open to subscribers within the same or a contiguous county where located. There must be at least 5 subscribers,

with a minimum individual subscription of 200 watts. Maximum subscription is the smaller of 120% of subscriber's prior year usage or 40% of the array output. Subscribers will receive a credit on their electricity bill proportional to their subscription ownership through virtual net metering, paid at the Value of Solar Tariff (VOST) rate.

Xcel energy is required to work with community solar projects, other utilities may develop their own.



Garfield County Airport Community Solar Array, near Rifle, Colorado

**Technical facts about a 1MW array** – We will need between 3-5 acres for a ground mounted array. In Winona, with no shading, an array with a 1MN 'name plate' rating will produce about 1.1 to 1.3 MWh of electricity per year, enough to power around 100 to 115 homes.



What roles would your institution like to play – We will begin our outreach to community solar developers in July and would like your involvement as a potential host site, outreach partner, financier, or subscriber.



**A Growing Industry with a Bright Future** – Solar accounted for 74% of all new electrical generation capacity installed in the U.S. during the 1<sup>st</sup> quarter of 2014, a total of 1330 MW. Schools, non-profits and governments added over 100 MW for the 2<sup>nd</sup> quarter in a row. The US Department of Energy (DOE) and the National Renewable Energy Laboratories (NREL) have been tracking the decreasing price of solar and working to lower the price to around \$.75 per watt with the DOE SunShot initiative.



**How will it be financed** – Economies of scale reduce the cost by around 30% compared to a smaller residential size array. Before any incentives we could expect a price between \$3.00 to \$3.50 per watt of name plate, or 3 to 3.5 million dollars (for 1 MW). We will be seeking equity financing, where businesses that can take advantage of the 30% federal tax credit, and accelerated 5 year depreciation can reduce this price, and lower the per watt price our subscribers will pay.