

RENEW Wisconsin Statement in Support of the Richland County Solar Farm Richland County Zoning and Land Information Committee

November 5, 2018

Good afternoon, my name is Michael Vickerman, and I am Policy Director for RENEW Wisconsin. We are a nonprofit advocacy and education organization headquartered in Madison that works to expand renewable energy development and use in Wisconsin.

On behalf of our individual and businesses members who support the continued expansion of Wisconsin's renewable energy marketplace, RENEW Wisconsin strongly supports the Richland County Solar Farm proposed by Tradewind Energy. We come before the Richland County Zoning and Land Information Committee to urge you to approve a Conditional Use Permit, which would enable the project to proceed to construction.

If approved, this project will generate on average about 100,000 megawatt-hours of low-cost, emission-free electricity a year, enough electricity to supply more than 13,000 Wisconsin households.

This project serves the public interest and Richland County residents in the following ways:

State energy policy

Wisconsin law strongly favors the use of renewable energy. The Energy Priorities Law, adopted in 1994, states that "[i]t is the goal of the state that, to the extent that it is cost-effective and technically feasible, all new installed capacity for electric generation in the state be based on renewable energy resources" Wis Stats. 1.12(3)(b). The Richland County Solar Farm easily satisfies those two conditions.

Environment

To diversify their generation assets as well as reduce air and water emissions, Wisconsin's electric providers have begun to retire their oldest and least productive fossil plants and replace them with renewable generators. An example is Dairyland Power Cooperative, the wholesale provider for Richland Electric Cooperative and 17 other Wisconsin co-ops. After closing down its Alma Power Station in 2015, Dairyland signed long-term contracts to substantially increase its supplies of solar-and wind-generated electricity. Today, Dairyland has 15 solar farms in Wisconsin under contract, including the Ash Ridge installation in western Richland County. All of them produce

electricity without emitting any carbon dioxide, nitrogen oxides, ground-level ozone, mercury, particulates, and other harmful substances into the ground or the atmosphere. The same will be true of the Richland County Solar Farm.

Economic impacts - utility

Large-scale solar is a resource option that provides significant capacity benefits to electric providers as well as low-cost energy to their retail customers. One reason why utility-scale solar has become so affordable is that installations like the Richland County Solar Farm can be located near an existing substation. Moreover, the cost of solar-generated electricity will remain fixed over the project's operating life, a benefit that can flow to electricity customers in the form of lower rates.

Economic impacts - Richland County

With a fresh flow of revenue generated from the Richland County Solar Farm, local governments will have the option of either allocating those dollars toward essential public services, or reducing property tax rates broadly, or both. A few Wisconsin jurisdictions that host renewable energy projects have used project-generated revenues to supplement their road maintenance and repair budgets, while others have augmented police and fire service through vehicle and equipment purchases. This revenue stream has no strings attached to it, thereby enabling local elected officials to use their discretion to decide how the revenue can best serve their communities.

Agriculture

See attached discussion, which was adapted from a recent letter-to-the-editor published in the *Dodgeville Chronicle*.

Last, RENEW Wisconsin has created an online educational resource to help people understand how solar farms work and why they are sprouting up in rural Wisconsin. We invite members of the Zoning Committee as well as the broader community to visit our web site and discover why solar energy, whether deployed on a roof or on farmland, is rapidly becoming the default resource option in Wisconsin. The web address is:

https://www.renewwisconsin.org/solarfarms/

Thank you for your consideration of our views.

Solar Farms: A Natural Fit for Richland County

By Michael Vickerman RENEW Wisconsin

Adapted from a letter published in the November 1, 2018, Dodgeville Chronicle.

As demand for clean electricity keeps growing, more farmers are seeing an opportunity to supply the world around them with high-value electricity direct from their fields and pastures. The first solar farm in Wisconsin debuted four years ago on a Vernon County pasture. Today, solar farms are a cost-competitive source of clean, renewable energy, and they are proving to be very popular with the farmers hosting them. The income they earn from leasing their land helps them keep their land in the family.

There are many reasons why the term "solar farm" is an apt description for projects like Tradewind Energy's Richland County Solar Farm. A solar farm starts with rows of horizontal poles that run north and south. Mounted on these rotating poles are panels that follow the sun as it crosses the sky going east to west. Between the first rays of sunlight and the last ones of the day, these panels soak in the sunshine and convert it into electricity. The rain that falls on the field keeps the panels clean and productive before being absorbed into the ground underneath.

But there is more to a solar farm than just the electricity that flows out from the land to the grid. There is also the ground cover consisting of native plants and short-growing meadow grasses. This layer of deep-rooted vegetation performs many services that benefit the solar farm itself as well as the farms around them. In addition to minimizing runoff and fixing nutrients in the soil, these perennials create a high-quality habitat for bees, butterflies, and other insects that move pollen in and around the fields and improve farm productivity.

When the solar panels have reached the end of their useful lives, crop production can resume on the land that has become more fertile as a result of the native plantings.

Harnessing solar energy has always been integral to agriculture, and generating electricity from solar panels and delivering it to market is consistent with the time-honored farm practice of producing something of value from sunshine, rainfall, and soil.

Michael Vickerman is policy director for RENEW Wisconsin, a renewable energy advocacy and education organization headquartered in Madison.