AWARD PRESENTATION

Michael Vickerman

RENEW WISCONSIN

RENEWABLE ENERGY PIONEERS OF THE YEAR

Madison Gas and Electric
Middleton-Cross Plains Area School District
City of Middleton

Madison Gas & Electric's

RENEWABLE ENERGY RIDER

ATTRIBUTES OF A UTILITY OFFSITE PV SERVICE

- Price of renewable electricity over a 30-year period is specified in a Power Purchase Agreement
- Service pays for the project -- does not shift costs to other customers
- Sidesteps solar siting constraints at customer's own facilities
- Utility assumes all project management responsibilities
- Service can account for significant fraction (<40%) of customer's load

July 26, 2019

26, 2019 WISCONS

CAL&STATE

Deal on solar power a first

Energy from panels to serve Middleton, school district and others

EMILY HAMER
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As interest in clean energy increases, many local governments, school districts, technical colleges and large corporations want to get power from large-scale renewable energy plants located nearby, but don't have the means to access them.

A first-of-its-kind agreement in Wisconsin between Madison Gas & Electric, the city of Middleton and the Middleton-Cross Plains School District — which was approved Thursday by the Wisconsin Public Service Commission — will allow for just that.

The PSC unanimously approved the partnership on a 17,000-panel solar project that is set to be built on a field next to Middleton Municipal Airport.

Under the agreement, MGE will build the solar array, and Middleton and the school district will pay to get access to 1.5 megawatts of energy — enough energy to power 475 homes in a year — from the panels. The total amount of energy produced by the array will be 5 megawatts.

PHIL LEVIN

A field next to the Middleton Municipal Airport will be home for a large solar array with 17,000 panels if a Madison Gas & Electric solar project receives final approval from the Federal Aviation Administration. The city of Middleton and the Middleton-Cross Plains School District would use some of the power generated.

The city and the school district will be the first-ever customers in Wisconsin to contract with their local power utility to receive clean energy from an off-site solar plant, according to Renew Wisconsin. The partnership opens the door for other organizations to do the same, said Renew Wisconsin executive director Tyler Huebner.

"This approval blazes a path that state government, local governments, and companies all across Wisconsin can follow to voluntarily increase their renewable energy usage in a cost-effective manner," Huebner said in a statement.

The new agreement, called a Renewable Energy Rider, allows large energy users with multiple facilities — such as governments, school districts or large companies — to source their energy from a nearby solar plant. MGE spokeswoman Kaya Freiman said this is MGE's first-ever Renewable Energy Rider.

"It's an innovative model for growing clean energy in our community," Freiman said.

Please see SOLAR, Page A5

First offsite PV array approved for serving a utility's retail customers in Wisconsin

mgoe® Madison Gas and Electric

MIDDLETON The Good Neighbor City

Middleton - Cross Plains Area School District
inclusive. innovative. inspiring.

WISCONSIN STATE JOURNAL

WEDNESDAY, OCTOBER 30, 2019 | A3

LOCAL&STATE

MGE breaks ground on Middleton solar farm

Utility also plans 20-megawatt project in Fitchburg

CHRIS HUBBUCH
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MIDDLETON — Madison Gas and Electric announced the start of construction Tuesday of a 5-megawatt solar farm in Middleton and is planning another 20-megawatt project in Fitchburg to provide clean energy for customers.

The Middleton project, to be constructed at the Middleton Municipal Airport, is expected to be completed next year and will be the utility's largest solar farm — but not for long.

Keebler

Brar

MG&E has contracted to sell 30 percent of the power generated to the Middleton-Cross Plains School District and the city of Middleton, which last year approved a resolution to power all city operations with renewable energy by 2035.

The rest will be available to residential customers through the company's Shared Solar program.

MG&E president and CEO Jeff Keebler, who earlier this year announced a goal to produce carbon-neutral electricity by 2050, said the project represents "another step toward our shared energy goals."

"We're working as quickly as we can toward that goal," Keebler said.

The school district expects its 1-megawatt share of the solar farm will save more than $28,000 in energy costs in its first year and more than $1 million over the next 30 years.

Middleton Mayor Gurdip Brar said the city's share of the airport solar farm is expected to save $1.2 million over the life of the project. He said the city is also putting solar panels on its buildings and is open to other large-scale developments.

"I think we're a leader in sustainability," Brar said. "But there's a lot more we can do."

MG&E expects to complete a 9-megawatt solar farm later next year at the Dane County Regional Airport to provide power for Dane County operations and has purchased a 150-megawatt share of two large solar farms expected to come online in early 2021.

Please see SOLAR, Page A5

Solar

From A3

The utility also has plans to purchase a 20-megawatt solar farm being developed near Lacy Road and South Seminole Highway in Fitchburg.

Sterling Root, manager of business development for EDF Renewables, said the company plans to apply for a conditional use permit early next year and to break ground in the spring or summer.

MG&E spokesman Steve Schultz said the project, known as the O'Brien Solar Farm, would likely be built in stages and made available through Renewable Energy Rider, which allows commercial and industrial customers to contract for clean energy.

Once completed, the announced solar projects will account for more than a third of MG&E's owned generation capacity.

Now under construction, MGE's 5 MW solar array will set aside 1.5 MW for its first two Renewable Energy Rider customers.

RENEWABLE ENERGY BUSINESS OF THE YEAR

Carlson Electric

Hayward, Wisconsin

Carlson Electric

WISCONSIN'S #1 SOLAR INSTALLER - SINCE 1977 - OFFICES IN HAYWARD & HUDSON

AFFORDABLE HOUSING

Sawyer County Housing Authority

Project capacity: 153 kW
(6 locations, 52 households in the Hayward, WI area)

Legacy Solar Co-op

Carlson Electric

Northland Lutheran High School

Kronenwetter

SOLAR FOR GOOD

Humane Society of Burnett County

Spooner Civic and Community Center

USDA Rural Development
U.S. DEPARTMENT OF AGRICULTURE

PACE
PACE WISCONSIN

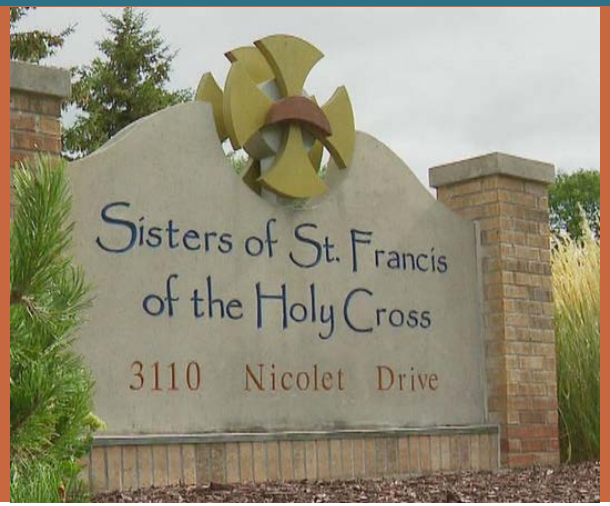
On deck for 2020

More solar-powered affordable housing!

(116 kW serving 48 households at six locations in the Hayward, WI area)

SOLAR FOR GOOD

RENEWABLE ENERGY CATALYST OF THE YEAR



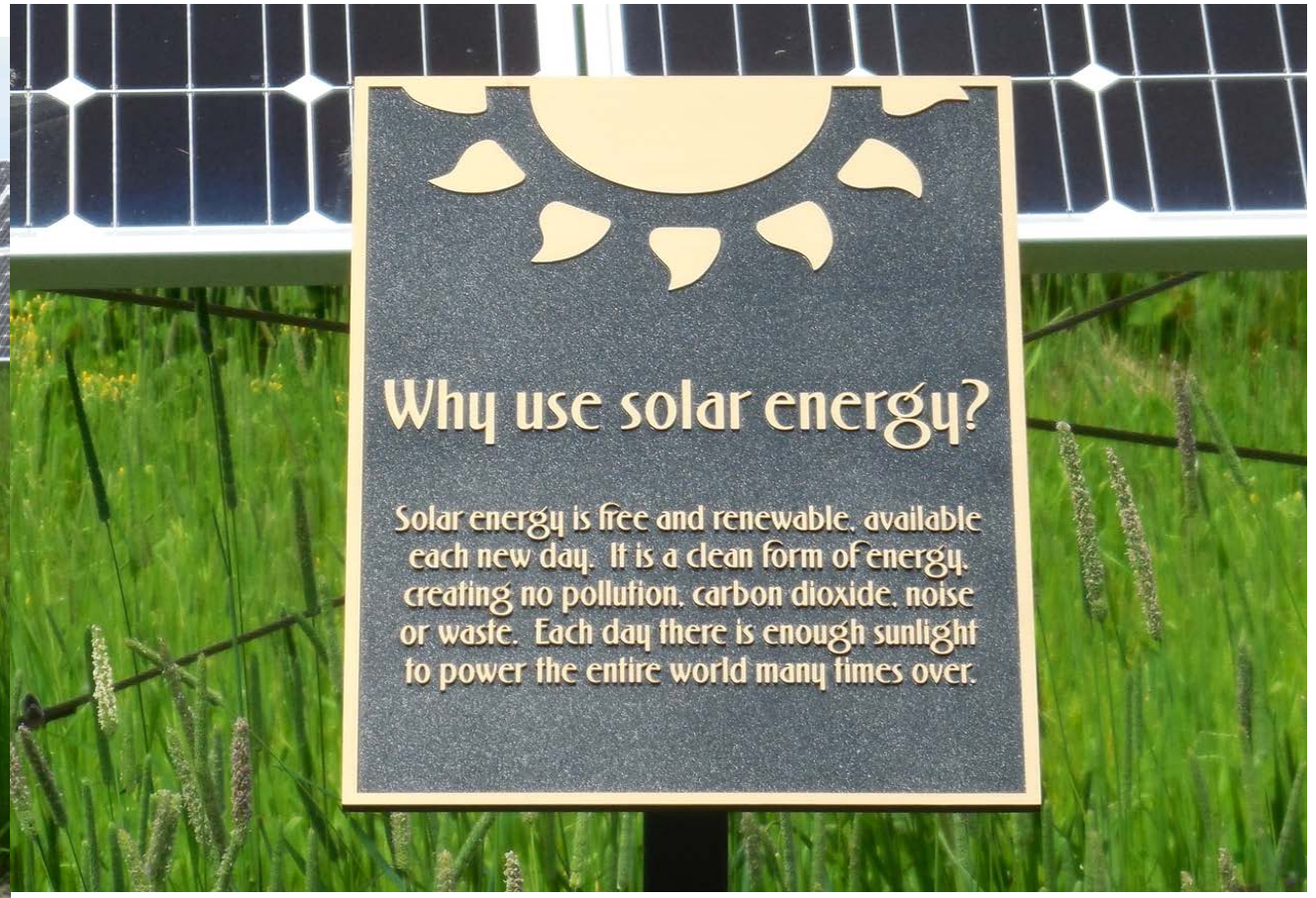
Sister Rose Jochmann

Sisters of St. Francis of the Holy Cross
Green Bay

Sister Rose Jochmann

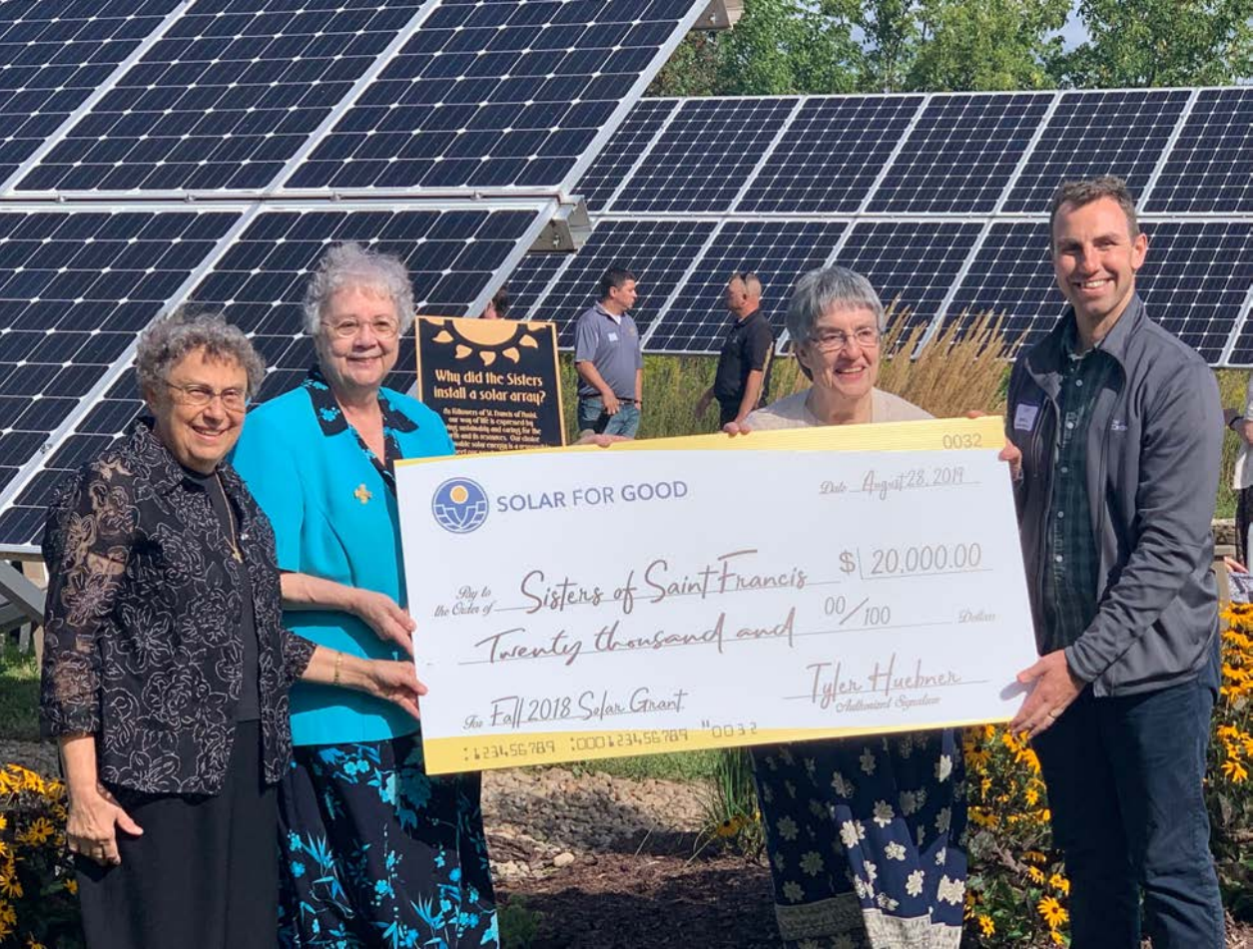
112 kilowatts

Dedication ceremony, June 18, 2015, of the Sisters' first array, a 112 kilowatt designed and installed by Green Bay-based Eland Electric.



More than just a power plant, the Sisters' array served as an outdoor classroom and a landscape for promoting an environmental ethic.

The first array accounted for 30% of the electricity used by the Sisters. It was a good start, but the Sister's sustainability committee, chaired by Sister Rose, aspired to reach a higher percentage.



Sister Rose took charge of the effort to expand their use of solar and raise funds to build a second array. Grants from Focus on Energy and Solar for Good accounted for one-third of the array's cost.

Sister Rose: "We've spread the message about the solar project. We've reached at least 500 people through presentations."


NEW AT 6:00
SISTER ROSE JOCHMANN
SISTERS OF SAINT FRANCIS OF THE HOLY CROSS

RENEWABLE ENERGY CATALYST OF THE YEAR

The team of
Bjorn "Red" Thompson
Jon McCarthy
Attic Angel Community

ATTIC ANGEL COMMUNITY

Attic Angel's first foray into solar power came in 2018, with the installation of 98 kW on the main building. As members of AA's sustainability committee, Red and Jon helped select the solar contactor (SunVest Solar) and raise money for the project.

Then Red and Jon turned their attention to their own community (the Prairie Point residences). Working with SunVest, Red and Jon designed an offering that would put solar PV on their own rooftops and those of their neighbors. Attic Angel Association gave them all the support they needed.

Red and Jon then approached all of their Prairie Point neighbors with a standard offer for becoming solar hosts, much like a solar group buy. The proximity of these residences to each other as well as their physical similarity to each other were key factors in landing on an affordable price.

The Result?

40 of the 123 residences in Prairie Point signed up to host solar panels.

Red and Jon's initiative leveraged in the installation of 133 kW of solar in 2019.

Red and Jon's initiative coincided with the installation of a 135 kW array serving Attic Angel's memory care unit. The campus now hosts 366 kW of rooftop solar capacity, by far the largest solar investment by a senior housing community in Wisconsin.

A TESTIMONIAL FROM SUNVEST SOLAR

SunVest Solar
June 19, 2019 ·

When Madison's senior living campus, Attic Angel Community, decided to 🌞 Go Solar🌞, they moved FAST!! 🏃‍♀️🏃‍♂️

In 2018, they installed 98kW on one apartment building. This spring, 40 independent units installed a total of 133kW, and most recently they installed 135kW on their assisted living facility.

You're doing great things for your community and the environment. Way to go!!

Cashton Array • 2 MW

RENEWABLE ENERGY PROJECT OF THE YEAR

BUTTER SOLAR

Butter Solar represents the culmination of a unique public-private partnership involving an independent power developer and its partners, municipal utilities, a food cooperative, and a city government.

Argyle array • 700 kW

Upper Midwest Municipal Energy Group

BluEarth™ RENEWABLES

OneEnergy RENEWABLES

ORGANIC VALLEY® FARMER-OWNED

CITY OF MADISON WISCONSIN

UMMEG and its member communities purchase the output from the solar arrays developed by OneEnergy Renewables.

Elroy • 1.5 MW

New Lisbon • 2.5 MW

At the same time, Organic Valley and the City of Madison purchase the renewable energy attributes associated with the solar output, providing another revenue stream that contributes to the project's financing.

The REC purchasers—Organic Valley and the City of Madison—have committed themselves publicly to ambitious renewable energy/carbon reduction goals.

Stanley Minnick • Organic Valley

WITH THE REC PURCHASE …

Organic Valley Becomes 100 Percent Renewably Powered

Largest Food Company to Source All Its Electricity from Renewable Sources Brings Cost Savings to Rural Midwest

Organic Valley, August 01, 2019

Organic Valley, America's largest cooperative of organic farmers and one of the nation's leading organic brands, today announced that construction of three community solar projects totaling 12.67 MWdc is complete, making the cooperative the largest food company in the world to be 100 percent renewably powered. These solar projects are part of the 32 MWdc Butter Solar Portfolio ("Butter Solar") which is owned and operated by BluEarth Renewables US.

MIDWEST ENERGY NEWS

LOCAL GOVERNMENT

By Kari Lydersen
March 24, 2017

Wisconsin's capital city sets a high bar with ambitious renewable energy goal – 100% RE by 2030

Madison, Wisconsin committed to getting ***100 percent of its energy from clean, renewable sources*** in a resolution passed unanimously by the City Council on Tuesday. It became the **24th city** to make such a promise.

RENEW WISCONSIN

Note: Covers City of Madison operations, including transportation and heating. **

REC's from five Butter Solar arrays will account for 1/3rd of Madison's clean electricity goal

Sheep from a neighboring farm demonstrating their value as a vegetation management tool at Butter Solar's Cashton array.

A neighboring farm's sheep herd helps manage the organic pasture where the new solar project is located. *Courtesy of Lexi Leum from Organic Valley*

Construction - Argyle array

Wisconsin contractors such as Arch Electric participated in the construction of Butter Solar, contributing expertise and high-quality workmanship to the job sites.