

SMALL SOLAR FARMS - WHY MORE ARE NEEDED

- Michael Vickerman
- Policy Director
- RENEW Wisconsin
- November 15, 2022

Hermsdorf Farm 8 MW



On the border between City of Madison and Town of Cottage Grove



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WHAT FLAVORS OF SOLAR ARE NEEDED FOR THE FUTURE?

All are needed!



Chris Clark, ceo, Xcel



Utility-scale – transmission/bulk

Utility-scale – distributed applications

Rooftop – commercial & industrial

Rooftop – residential

Solar-powered transportation

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DEFINITION – SMALL SOLAR FARM

- ❖ Front-of-meter installation
- ❖ Generation remains within utility distribution system – does not enter transmission system
- ❖ $< 0.5 \text{ MW} < 20 \text{ MW}$



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ATTRIBUTES – SMALL SOLAR FARM

- ❖ Very few landowners involved
- ❖ Relatively fast turnaround for permitting + construction
- ❖ Flexible siting – urban or rural settings
- ❖ Flexible uses – can serve:
 - Rate base
 - Individual customers (onsite and offsite)
 - REC (renewable energy credit) markets



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STROBUS SOLAR
1.5 MW
JACKSON ELECTRIC COOPERATIVE

MASTODON SOLAR PORTFOLIO

RURAL SETTING

OneEnergy
RENEWABLES

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2022 RENEWABLE ENERGY SUMMIT
ALL ROADS LEAD TO CLEAN ENERGY
THURSDAY, JANUARY 27, 2022

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URBAN SETTING

O'BRIEN SOLAR FIELDS

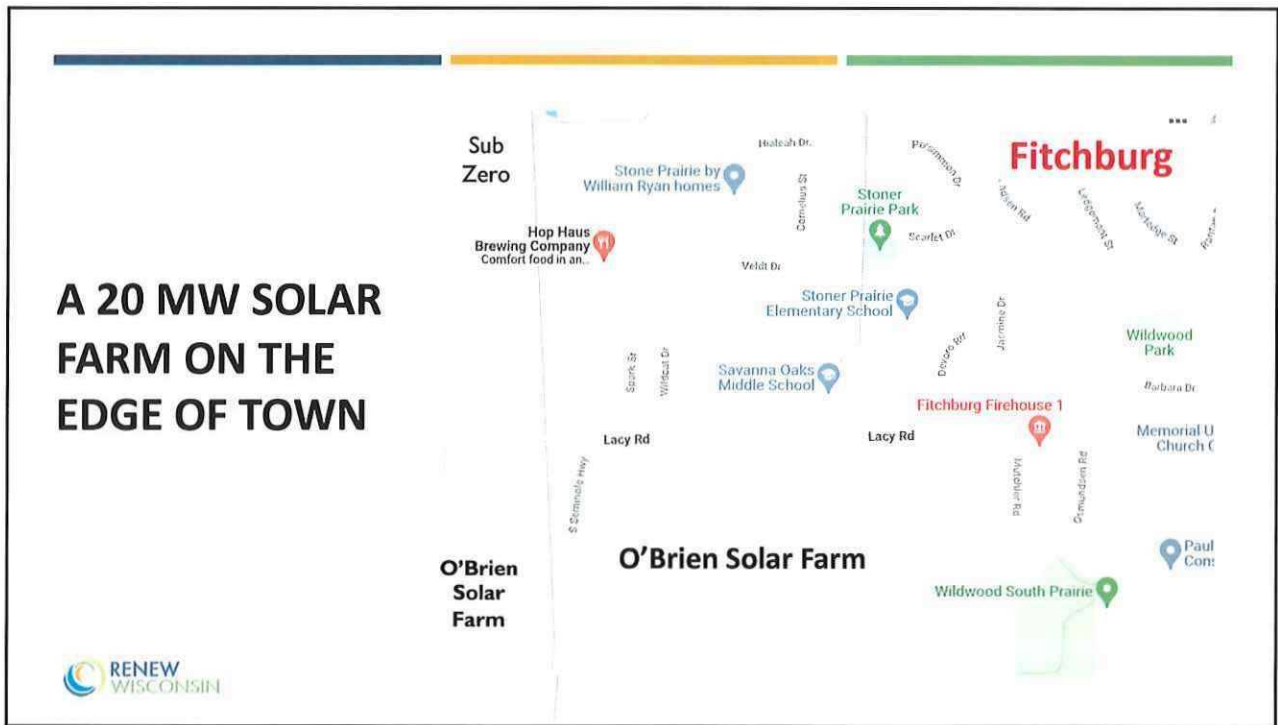
mgOe
Madison Gas and Electric

Fitchburg
20 MW

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THE POLICY CASE FOR SMALL SOLAR FARMS

- Many developable sites in Wisconsin
- Generation is community-scale (local)
- Finite supply of sites accommodating large-scale solar
- **Easier to integrate traditional agriculture onsite**
- Economics between small and large solar farms can be similar
- Large solar farms alone can't take utilities all the way to zero carbon

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SMALL SOLAR FARMS IN DANE COUNTY

Project	Capacity (in MWAC)	Status
Morey Field (Middleton)	5	Operational - 2020
Dane County Airport (Madison)	9	Operational - 2021
O'Brien Solar Fields (Fitchburg)	20	Operational - 2021
Hermsdorf Farm (Madison)	8	Operational – 2022
Yahara Solar (T. of Cottqge Grove)	17	Under construction (in service 2/2023)
Tyto Solar (Fitchburg)	6	Approved (in service 11/2023)



65 MW of solar generation by 12/31/2023

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QUESTIONS?

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