

Grow Solar Wisconsin Team

Rooftop Solar Challenge

SunShot Initiative
U.S. DOE

Niels Wolter
Madison Solar Consulting
Task Leader

Photo: Madison
Gas and Electric



DOE SunShot Initiative

- Reducing the installed cost of solar energy systems by about 75% - cost competitive with conventional sources
- Restore U.S. leadership in the global clean energy race – JFK’s MoonShot

Actively supporting

- Technical innovation to reduce system cost
- Reducing grid integration costs
- Reducing institutional costs

Solar Rooftop Challenge

“Supports 22 regional teams to spur solar power deployment by... standardizing permitting, zoning, metering and connections processes – and improving financing options to reduce barriers and lower cost for residential and small commercial rooftop solar systems...”

U.S. DOE press release Dec 1, 2011

Will effect all RE DG no mater where it is sited

Solar Roof Challenge Recipients

- City of Chicago (ELPC)
- Minnesota Department of Commerce
- Arizona Governor's Office of Energy Policy
- City University of New York
- Colorado Solar Energy Industries Association (RMI)
- Massachusetts Department of Energy Resources
- SolarTech (Silicon Valley, CA)

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- The background of the slide is a close-up, slightly blurred view of a solar panel array. The panels are arranged in a grid, and the individual solar cells are visible as a pattern of small, dark squares. The lighting is bright, creating a high-contrast, almost white background with dark grid lines.
- Permitting and Interconnection Process
 - Net Metering and Interconnection Standards
 - Financing Options, Planning and Zoning

Team

- Nick Hylla (MREA) – Admin Lead, Out reach & Education
- Niels Wolter (MSC) – Program Lead & Interconnection
- Bryant Moroder (SRG) – Permitting & Financing models
- Larry Krom (L&S) – Interconnection & Net Metering
- Michael Vickerman (RENEW) – PPAs & Net Metering
- Amy Heart (City of Milwaukee): Permitting, Financing Models, Zoning & Code

- Other team members: City of Madison (Jeanne Hoffman) and City of Marshfield (Steve Barg) – Permitting & Finance

Team Allies

- Madison Gas and Electric
- University of Wisconsin – Extension
- We Energies
- Wisconsin Public Service Commission
- Wisconsin Distributed Resources Collaborative
- Wisconsin Solar Energy Industry Association
- Wisconsin State Energy Office

Grow Solar WI - Year One Goals

- Streamline solar permitting processes and develop a standardized process
- Use collaborative techniques to develop clear strategies to improve Wisconsin's interconnection and net metering standards
- Develop the public policy case for improved net metering standards and articulate it in relevant regulatory proceedings

Grow Solar WI – Year One Goals

- Increase the solar financing options through the replication of existing successful pilot programs in Madison and Milwaukee (loan and group purchase)
- Clarify the legality of third party power purchase agreements (and leases)
- Create model solar zoning language and solar ready building codes
- Disseminate program results (website, Solar Decade Conference, and public relations)

Net Metering, Interconnection, & Financing

- Create a Wisconsin Policy Road Map: RENEW
- Survey WI RE DG industry regarding interconnection issues
- Formulate a MOU Among Utilities regarding Net Metering Practices: L&S, MSC
- Collaborate with State Policymakers on Model Net Metering Policies in Utility Rate Cases: RENEW
- Review and Recommend Changes to Interconnection Standards: L&S
- Clarify Third-Party Ownership Questions through a PSCW Proceeding: RENEW

Identify Top Interconnection Issues & Best Practices: MSC

- Survey Wisconsin solar stakeholders to identify concerns with current interconnection processes and standards.
- Summarize survey results with recommended solutions based on Best Practices
- Share findings and best practices with WIDRC, utility representatives, Public Service Commission of Wisconsin, state energy office, and posted on the “Grow Solar Wisconsin” website.

Net Metering MOU

Find agreement on some issues before rate

- cases, for example:
 - Net metering cap
 - Rollover
 - Value of excess production
- Goals:
 - Statewide uniformity
 - Simplify the rate case process
- Through WIDRC

Policy Work

RENEW Is Project Lead on Three Tasks

- Create a WI Policy Road Map
- Model Net Metering Policies – Utility Rate Cases
- Clarify Third-Party Ownership Contracting Questions

Policy Work

Policy Road Map

- Prepare net energy billing issue brief – done
- Assess the need for overarching set of policies to expand options and opportunities for prospective customer-generators (e.g., REC aggregation)

Policy Work

Principal Deliverable – Task 1

- Prepare a road-map-style report/presentation that summarizes public policy case for expanding/strengthening net energy billing offerings and recommends pathways for achieving them in 2013 and beyond.
- Report to be completed fall of 2012

Policy Work

Policy Task 2 – Net Energy Billing

- Identify model net metering policies
- Review 2012 rate case filings for proposed changes to net metering service
- Identify businesses/customers to take part in rate cases as witnesses
- Submit testimony from RENEW and its witnesses
- Assess results

Policy Work

Policy Task 3 – Third-Party Owned Renewable Energy Systems

- Step 1. Review forthcoming PSCW memo on statutory context for 3rd party-owned systems selling energy to host customers
- Step 2. Form working group – determine whether policy changes are needed and, if so, how best to effect such changes
- Step 3. Prepare report/slide show capturing working group's findings. Distribute report.

Interconnection Standards

Lead

- Larry Krom, L&S Technical Associates, Inc.

Participate

- MSC, MREA

Support

- City of Milwaukee

Interconnection Standards

Primary Recommendations:

- Legislative action to require consistency in interconnection standards throughout the state.
- Legislative or regulatory action to adopt the FERC's technical screens as part of an expedited interconnection process.
- Legislative or regulatory action to prohibit external-disconnect-switch requirements for inverter-based generators.

Interconnection Standards

Secondary Recommendations:

- Legislative or regulatory action to prohibit additional insurance requirements.
- Legislative or regulatory action to reduce interconnection process timelines to at least the FERC standards.
- Legislative or regulatory action to remove system size limit.
- Legislative or regulatory action to institute informal process for interconnection disputes.

Interconnection Standards

2010 Category	2010 FTG Score	2011 Review Score
Eligible Tech	0	0
System Capacity	-0.5	-0.5
Breakpoints	1	1
Timelines	-1	-1
Interconnection Fee	2	2
Engineering Fee	0	0.5
External Disconnect	-1	-1
Certification	0	0
Tech Screens	-2	-2
Secondary Networks	1	1
Standard Form	0.5	0.5
Insurance	-2	0
Disputes	0	0
Rule Coverage	0.5	0.5
Misc.	-1	-1

Interconnection Standards

Tasks:

- Research interconnection standards and related information
- Distribute standards research on an information exchange
- A Task Force will use a facilitated process to identify issues (barriers) that limit changes to the current interconnection practices
- Use facilitated process to develop strategies to overcome identified barriers
- Develop approaches to implement strategies to overcome barriers that will be identified by the Task Force in three categories:
 - 1) those that require legislation,
 - 2) those that require administrative rule changes and
 - 3) those that can be changed by consent in a legally binding memorandum of understanding.
- The Task Force will develop a final report and a PowerPoint presentation of the issues, strategies, processes and results. To be posted to the information exchange webpage.

DOE's Strategy

- Recipients get one year of funding
- Those that do the best may be funded for 1 to 2 additional years
- Teams compete with each other

Role for WIDRC

- Particularly in regards to
 - Interconnection rules and processes
 - Net metering rules
 - Third party ownership
- By participating in:
 - Surveys and information requests
 - Collaborative discussion
 - Collaborative decision making

To Whom It May Concern:

As Governor of the State of Wisconsin, I am pleased to provide this letter of support for the *Wisconsin Rooftop Solar Market Transformation* project application to the SunShot initiative: Rooftop Solar Challenge to Induce Market Transformation funding opportunity.

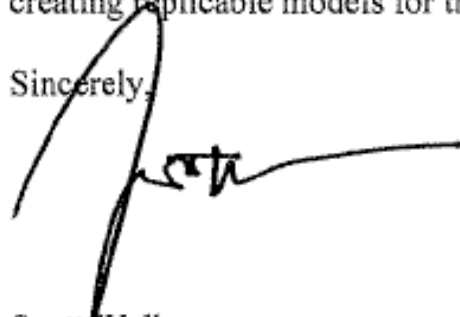
After leading the way in clean energy development, Wisconsin is poised to create a mature solar market. We hope the Department of Energy will recognize Wisconsin's readiness to address the soft-costs of solar that will help our state create a truly sustainable solar market.

This grant will allow communities around the state to get on the fast-track to promoting solar energy use through better permitting processes. This project will also allow the State of Wisconsin to clarify rules and standards relating to financing, interconnection and net metering.

The City of Milwaukee and the City of Madison have seen tremendous success as a result of the DOE's Solar America City program, and Wisconsin has seen an increase in interest and investment in solar energy as a result. We would encourage support to help further these goals as part of the Department of Energy's SunShot Initiative.

My office is supportive of the *Wisconsin Rooftop Solar Market Transformation* application submitted by Midwest Renewable Energy Association that includes the cities of Milwaukee and Madison. The SunShot Initiative will help Wisconsin's solar industry expand and mature, while creating replicable models for the entire country.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Walker", with a long horizontal line extending to the right.

Scott Walker
Governor

Contacts

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