

Minnesota Energy Policy Update

Solar Powering Minnesota
March 7, 2014



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Minnesota Department of Commerce,
Division of Energy Resources

Update on 2013 Solar Legislation

2013 Solar Legislation

Omnibus Energy Bill

MN Laws, 2013,
Chapter 85 HF 729,
Articles 7-13

Signed into Law:

May 23, 2013



2013 Solar Legislation

- Solar Energy Standard
- Community Solar
- **Value of Solar Tariff**
- **Made in MN Solar Incentives**
- **Xcel Solar*Rewards**
- **Net Metering**
- **PACE and GESP**



2013 Solar Legislation

Financing

- Property Assessed Clean Energy (PACE)
- Guaranteed Energy Savings Program (GESP)



Value of Solar

- Legislation requires the Department of Commerce to develop a methodology to quantify the value components of distributed solar electricity including:
 - the value of energy and its delivery, generation capacity, transmission capacity, transmission and distribution line losses, and environmental value.
- VOS tariff separates customer electricity usage and production
- Investor Owned Utilities may file VOS tariff in lieu of Net Metering for solar PV < 1MW

MN Value of Solar Methodology

- On Friday, Jan 31, the Department of Commerce submitted a VOS Methodology to the PUC (docket 14-65)
- The MN VOS Methodology is based on the enabling statute, input from four stakeholder workshops and written comments, and Department analysis
- 25 year fixed rate contracts, adjusted annually for inflation

MN VOS Stakeholder Engagement

- **Sept 17, 2013: Workshop 1: Overview of National Efforts** solar photovoltaic benefit and cost studies, Q&A
- **Sept 20, 2013: Initial Comments due** these comments were used to frame the Oct 1 workshop
- **Oct 1, 2013: Workshop 2**: Proposed approach to methodology, Stakeholder perspectives, Identification of key issues
- **Oct 8, 2013: Comments due on key issues** these comments were used to frame the Oct 15 workshop
- **Oct 15, 2013: Workshop 3**: Discussion of key issues, Facilitated discussion with stakeholders
- **Nov 19, 2013: Workshop 4**: Presentation of Initial Draft Methodology
- **Dec 10, 2013: Comments due on draft methodology** these comments were used to inform the final draft methodology that the Department submitted to the PUC on Jan 31, 2014
- **Workshop presentations, stakeholder comments, and draft methodology are posted on the Commerce website at:**
www.energy.mn.gov

Value of Solar Methodology

PUC schedule:

- **Jan 31, 2014** Department submitted the VOS Methodology to the PUC (**Docket 14-65**)
- **Feb 13, 2014** Initial Comments Due to PUC
- **Feb 20, 2014** Reply Comments Due to PUC
- **Mar 4, 2014** Information Hearing
- **Mar 12, 2014** Testimony and Deliberations
- **Apr 1, 2014** due date for PUC decision

Made in Minnesota (MiM)

- Available to Xcel Energy, MN Power, Alliant, & Otter Tail Power Customers
- 10 year performance based incentives
- \$15 M/yr for 2014 - 2023 from CIP and RDF
- Includes \$250k for Solar Thermal
- Residential and commercial systems <40kW
- **Applications due Feb 28**



2014 PV Incentives per kWh

Solar Module	Commercial For Profit up to 40 kW DC	Non-Profit/Government Up to 40 kW DC	Residential up to 10 kW DC
tenKsolar TKS-CXXXXXX 180 TKS-EXXXXXX 180 TKS-DXXXXXX 190 TKS-FXXXXXX 190 XT-A 410	\$0.13 per kWh	\$0.20 per kWh	\$0.29 per kWh
Silicon Energy Minnesota SiE-150*, SiE-155*, SiE 160*, SiE 165, SiE 170, SiE 175, SiE 180, SiE 185, SiE 190, SiE 195, SiE 200, SiE 205*	\$0.18 per kWh	\$0.27 per kWh	\$0.39 per kWh

2020: MiM and Solar*Rewards Program Capacity Estimates

- Made in Minnesota 2,700 systems: 40 MW
- Solar*Rewards 1,600 systems: 24 MW
- 4,300 New Small PV Systems under 40 kW
- 1.5% Standard to achieve 400 MWs

Solar Thermal Rebate Program

- \$250,000 annually
- 50% water heating; 50% air heating
- Application period to reopen on March 17th
- Projects will be reviewed on a first come, first serve basis until the 2014 funding is fully subscribed

2014 Approved Solar Thermal Collectors

Solar Collector	Commercial Properties	Multi-Family Residential	Single Family Residential
Energy Conservation Solarway 6000 Solar Skies Rural Renewable Energy Alliance	The lesser of 25% of the installed cost of a complete system or \$25,000	The lesser of 25% of the installed cost of a complete system or \$5,000	The lesser of 25% of the installed cost of a complete system or \$2,500

MiM 2014 Summary

- Applications for Commercial and Nonprofit PV: 332
- Applications for Residential PV: 287
- Total PV applications PV: 619

- Total Thermal Applications: 14

- Total Funding requested \$30 million+

- Total installed PV capacity of 13+ MWs

Net Metering

- All utilities, net metering <40 kW is unchanged
- **Public utilities only:**
 - Net metering cap raised to 1 MW
 - Single-customer meter aggregation on contiguous property
 - No standby charges < 100kW,
 - PUC to review standby charges $\geq 100\text{kW}$
 - Systems 40 kW - 1,000 kW
 - Solar & other DG: sized 120% to **energy**
 - wind: sized 120% to **load**



Financing: PACE

- Property Assessed Clean Energy financing for local government efficiency and renewable energy measures
- Bond assessment period extended from 10 years to 20 years.



Financing: GESB

- Extends Guaranteed Energy Saving Program contract limits from 15 to 25 years on state and local government buildings.
- Allows for more comprehensive EE retrofits and renewables.
- Public entities use energy savings to pay for improvements – budget neutrality



Thank You.
Questions?



More information...

- Reports posted online:
www.energy.mn.gov
 - MN Energy Future Study Scoping
 - Solar Thermal Study
 - Energy Storage Study
 - Energy Savings Goal Study
- Made in Minnesota Program now open:
mn.gov/made-in-minnesota



Xcel Solar*Rewards

- Starting spring 2014 for systems <20kW
- 10 year performance based incentives
- Proposed 8 cents/kWh for 2014
- \$5 M/yr for 2014 - 2018.
- Shifts funding from CIP to RDF.



Solar Energy Standard

1.5% solar by 2020

- Applies to Public Utilities (IOUs)
- Mining & Paper Mills exempted
- Approx. 400 MW by 2020 (estimate)
- 10% carve out for smaller solar (< 20 kW)

Goal of 10% solar by 2030



Community Solar Garden

- Xcel filed program on **Sept. 30, 2013**
- Docket: 13-867
- Projects <1MW
- Subscribers may live in a contiguous county
- Subscribers receive on-bill credit.

