

**PUBLIC DOCUMENT**  
**TRADE SECRET DATA EXCISED**

<b>Minnesota Public Utilities Commission</b>			
<b>INFORMATION DOCKET E999/M-18-205</b>		<b>Reporting Period:</b>	<b>January 1, 2017 - December 31, 2017</b>
<b>Solar Energy Standard Annual Report</b>		<b>Utility:</b>	<b>Minnesota Power</b>
Report Year:	2017	Date Submitted:	June 1, 2018

Filing Utility Information		Contact Information	
Company ID#	68	Contact Name	Katie Frye
Company Name	Minnesota Power	Contact Title	Customer Solutions Analyst
Street Address Line 1	30 W. Superior St.	Contact Telephone	(218)355-3236
Street Address Line 2		Contact Email	<a href="mailto:kfrye@mnpower.com">kfrye@mnpower.com</a>
City	Duluth		
State	MN		
Zip Code	55802		

**Minnesota Public Utilities Commission****INFORMATION DOCKET E999/M-18-205****Reporting Period:****January 1, 2017 - December 31, 2017****Solar Energy Standard Annual Report****Utility:****Minnesota Power****Report Year:**

2017

**Date Submitted:**

June 1, 2018

**Annual Minnesota retail sales for the reporting year**

Docket No. E999/CI-13-542, Commission Order (April 25, 2014), Order Points 4.A &amp; 4.B

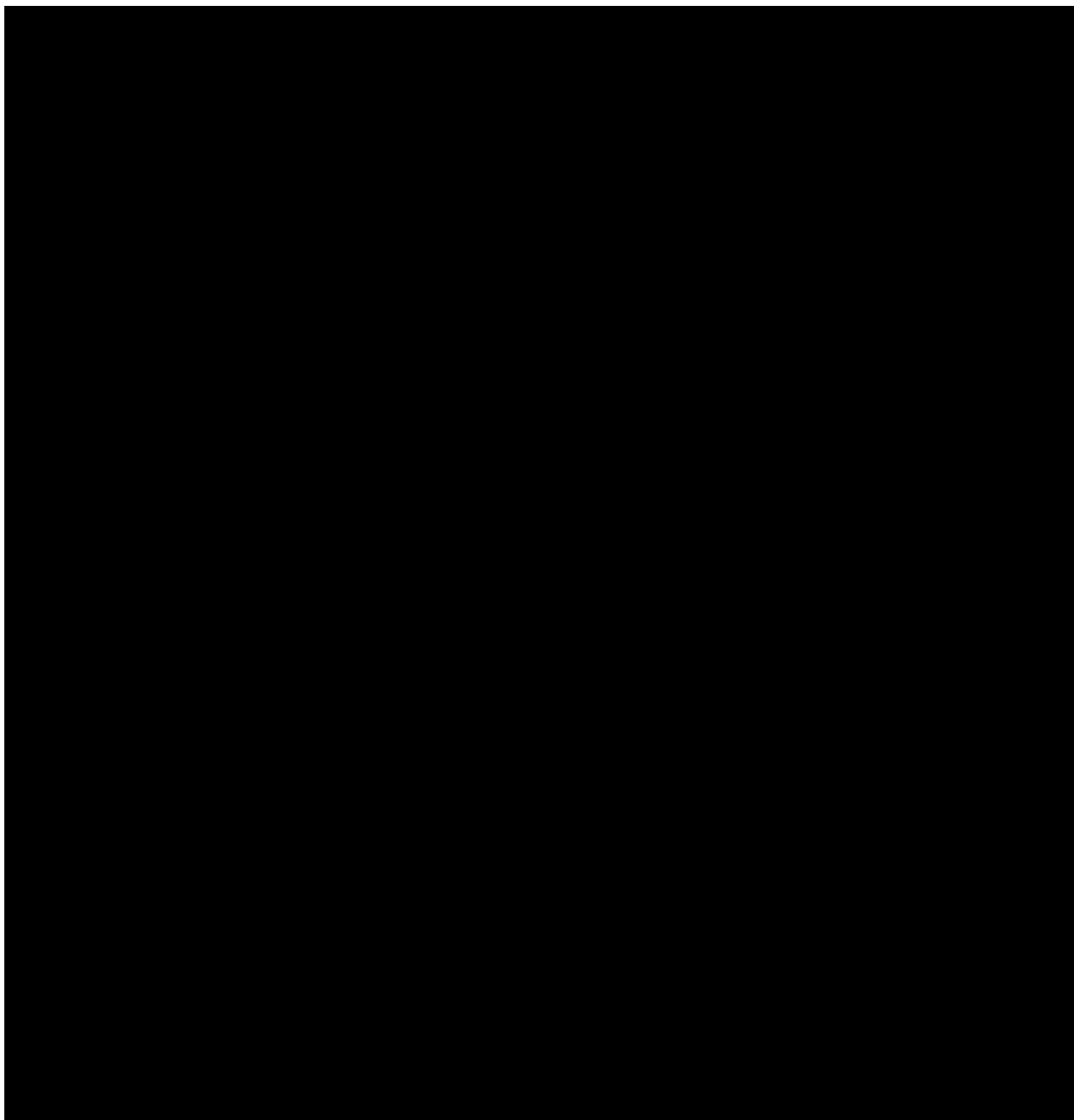
1. Annual MN retail sales for the reporting year	8,997,351,901
2. Annual Excluded customer sales for the reporting year	5,973,803,634
3. Annual Minnesota retail sales less exclusions	3,023,548,267

**Customer requesting exclusion from the SES that have been approved by the utility**

Docket Nos. E999/CI-13-542, E999/M-14-321, Commission Order (October 23, 2014), Order Point 2.a

Customer Name		Premise	NAICS	Annual kWh Usage
---------------	--	---------	-------	------------------

**[TRADE SECRET DATA EXCISED]**



Minnesota Public Utilities Commission			
<b>INFORMATION DOCKET E999/M-18-205</b>		<b>Reporting Period:</b>	<b>January 1, 2017 - December 31, 2017</b>
<b>Solar Energy Standard Annual Report</b>		<b>Utility:</b>	<b>Minnesota Power</b>
Report Year:	2017	Date Submitted:	June 1, 2018

Solar generation on the utilites' system during the reporting period					
Docket No. E999/CI-13-542, Commission Order (April 25, 2014), Order Point 4.E					
	Number of Facilities on Utility System	Capacity	Number registered in M-RETS	Capacity registered in M-RETS	SRECs Generated
Less than 40kW	217	1.731	76	0.824	513
Greater than 40kW	7	12.515	3	11.04	17,133

Estimated amount of solar generation a utility would be required to obtain in 2020		
Docket No. E999/CI-13-542, Commission Order (April 25, 2014), Order Points 4.F & 4.G		
	Capacity (MW)	SRECs (MWh)
Entire 1.5% Standard*	30	50,879
Small Scale Carve-Out (10% of 1.5%)	4	5,088
2030 Goal of 10%	198	339,192

\*Due to SREC banking from previously installed solar systems, Minnesota Power's total capacity need for 2020 is less than the 30 MW noted above.

**Breakdown of S-RECS generated**

Docket No. E999/CI-13-542, Commission Order (April 25, 2014), Order Point 5

	Balance at Beginning of Reporting Year	Accrued in Reporting Year	Used in Reporting Year	Year End Balance
1. Utility-owned solar projects	1,719	17,066	0	18,785
2. Solar Facilities that have entered into a PPA with the utility	0	0	0	0
3. Community Solar Gardens - Minnesota Power Program*				
a. Receiving an incentive (any type)	0	0	0	0
b. Not receiving an incentive	0	67	0	67
4. Community Solar Gardens (VOS)				
a. Receiving an incentive (any type)	0	0	0	0
b. Not receiving an incentive	0	0	0	0
5. Facilities receiving a VOS rate (not included above)	0	0	0	0
6. Facilities under a net metering tariff				
a. Receiving an incentive (any type)	347	513	0	860
b. Not receiving an incentive	0	0	0	0
7. Facilities receiving an incentive (not included above)	0	0	0	0
8. Facilities that do not fall into any other category	0	0	0	0
Total	2,066	17,646	0	19,712

\*Per a conversation with Hanna Terwilliger on May 23, 2017, Minnesota Power amended the spreadsheet to include a category for "Community Solar Gardens - Minnesota Power Program". The SRECs included in this category are from the 1 MW and 40 kW solar arrays associated with Minnesota Power's Community Solar Garden Pilot Program but are not associated with customer subscriptions as the program started in 2018.

**Purchases and sales of S-RECS to meet the SES**

Docket No. E999/CI-13-542, Commission Order (April 25, 2014), Order Point 4.K

	SRECs Purchased	SRECs Sold
SES (>20k/40W)	0	0
Small Scale Carve Out (<20/40kW)	0	0
Total	0	0

<b>Minnesota Public Utilities Commission</b>			
<b>INFORMATION DOCKET E999/M-18-205</b>		<b>Reporting Period:</b>	<b>January 1, 2017 - December 31, 2017</b>
<b>Solar Energy Standard Annual Report</b>		<b>Utility:</b>	<b>Minnesota Power</b>
<b>Report Year:</b>	2017	<b>Date Submitted:</b>	June 1, 2018

**January 1, 2017 - December 31, 2017**

## Minnesota Power

June 1, 2018
--------------

Docket Nos. E999/CI-13-542, E999/M-14-321, Commission Order (October 23, 2014), Order Points 2.b & 2.d

[illegible]

### **Information on Assumed Capacity Factor**

Only capacity factors for solar facilities registered in M-RETS are reported. Minnesota Power does not have capability to access generation values for all of the solar facilities located on the system that are not registered in M-RETS.

Capacity Factor is the weighted average Capacity Factor for the aggregated Solar Projects for MiM DG Solar <40 kW and MP DG Solar <40 kW.

^MP Solar Garden Wrenshall started producing energy at the end of December 2017. The aggregate capacity factor for the Solar Gardens is not indicative of long-term generation expectations. Note the capacity factor for the MP Solar Garden Arrowhead, which was in operation all of 2017, was 18.2%.

### **Information on effective load carrying capability and MISO Capacity Accreditation**

Capacity accreditation value is UCAP for MISO planning year 2017-2018

\*Capacity accreditation value is UCAP for MISO planning year 2018-2019. The Solar Garden did not receive capacity accreditation value for planning year 2017-2018 because it was not available for the full year.