Minnesota Public Utilities Commission				
INFORMATION DOCKET E999/M-20-464 Reporting Period: January 1, 2019 - December 31, 2019				
Solar Energy Standard Annual Report	Utility:	Xcel Energy		
Report Year:	2019 Date Submitted:	June 1, 2020		

Filing Utility Information		Contact Information		
Company ID#	U12000	Contact Name	Amber Hedlund	
Company Name	Xcel Energy	Contact Title	Regulatory Case Specialist	
Street Address Line 1	414 Nicollet Mall	Contact Telephone	612.337.2268	
Street Address Line 2	401-7	Contact Email	Regulatory.records@xcelenergy.com	
City	Minneapolis			
State	MN			
Zip Code	55401			

Instructions

Due: June 1, 2019

Reporting Period: preceding calendar year

Complete the following worksheets and e-file in Excel (XLS or XLSX) format:

Worksheet 1, Utility Info

Worksheet 2, Retail and Excluded Sales

Worksheet 3, Solar Generation

Worksheet 4, Capacity Factors

Worksheet 5, Additional graphs the utility may choose to provide

Also complete and efile the Solar Energy Standard Report PDF supplement

To e-file, login, or register, at: https://www.edockets.state.mn.us/EFiling/home.isp
For directions on how to e-file, see: http://www.commerce.state.mn.us/eDocFile/eFilingHelp.html

For questions about the worksheets, send an email to: <a href="mailto:hanna.terwilliger@state.mn.us">hanna.terwilliger@state.mn.us</a>

For questions about e-filing, contact Karen Santori at 651-539-1530 or at karen.santori@state.mn.us .

PROTECTED DATA SHADED					
PUBLIC DOCUMENT					
NOT PUBLIC DA	TA HAS BEEN EXCISED				
Minnesota Pub	Minnesota Public Utilities Commission				
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Annual Minnesota retail sales for the reporting year					
Docket No. E99	Docket No. E999/CI-13-542, Commission Order (April 25, 2014), Order Points 4.A & 4.B				
1. Annual MN	Annual MN retail sales for the reporting year		29,161,074 MWH		
			[PROTECTED DATA BEGINS		
Annual Excluded customer sales for the reporting year					
3. Annual Min	nesota retail sales less exclusions				

PROTECTED DATA ENDS]

Docket Nos. E999/CI-13-542, E999/M-14-321	, Commission Order (October 23, 2014), 0	Order Point 2.a				
	Docket Granting				2019	Refund
Customer Name	Exclusion	Premise Number	Premise	NAICS	kWh Usage	(\$s)
Previously approved excluded customer	rs:					
PROTECTED DATA BEGINS						
						PROTECTED DATA EN
					2018	Refund

						NOTECTED DATA ENDS
					2018	Refund
Customer Name	Docket	Premise Number	Premise	NAICS	kWh Usage	(\$s)
New customers requesting exclusion:						
N/A - No additional customers have reques	sted exclusion at this time.					

Minnesota Public Utilities Commission					
INFORMATION DOCKET E999/M-20-4	64 Reporting Period:	January 1, 2019 - December 31, 2019			
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Report Year:	2019 Date Submitted: June	1, 2020			

Solar generation on the utilities' system during the reporting period					
Docket No. E999/CI-13-542, Commission Order (April 2	5, 2014), Order Point 4.E				
Number of Facilities on Utility System Capacity (MW) Number registered in M-RETS Capacity registered in M-RETS (MW) SRECs Generated					
40kW or less	5,124	53.00	53	25.51	30,664
Greater than 40kW	863	687.00	721	927.88	1,228,159

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	235	424,441		
Small Scale Carve-Out (10% of 1.5%) 31 42,444				
2030 Goal of 10%	1,509	2,621,515		

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 <sup>1</sup>	Accrued in Reporting Year	Used in Reporting Year	Year End Balance	
Utility-owned solar projects					
2. Solar Facilities that have entered into a PPA with the utility	892,952	398,736		1,291,688	
3. Community Solar Gardens					
a. ARR <sup>2</sup>	715,747	818,669		1,534,416	
b. VOS	133	4,044		4,177	
c. Other compensation method					
6. Facilities receiving a VOS rate (not incuded above)					
7. Facilities under a net metering tariff					
a. Receiving an incentive (any type)	62,324	30,098		92,422	
b. Not receiving an incentive					
8. Facilities receiving an incentive (not included above)					
9. Facilities that do not fall into any other category	10,425	7,276		17,701	
Total	1,681,581	1,258,823	0	2,940,404	

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 (>40W)	0	0			
Small Scale Carve Out (<=40kW)	0	0			
Total	0	0			

<sup>1.</sup> Beginning of year REC balance includes current solar RECs held in NSP's REC bank. Beginning REC balance may differ from previous year's ending REC balance to accommmodate for adjustments made to REC classification, REC allocations, or registration details of qualified solar resources.

 $<sup>{\</sup>it 2. Prior Period REC Adjustment for 2018 vintage by M-RETS Admin for Beginning Year Balance}\\$ 

Protected Data Shaded							
PUBLIC DOCUMENT							
N	OT PUBLIC DATA HAS BEEN EXCISED						
Minnesota Public Utilities Commission							
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## Additional information supporting assumed capacity factor, effective load carrying capability, and MISO capacity accreditation Docket Nos. E999/CI-13-542, E999/M-14-321, Commission Order (October 23, 2014), Order Points 2.b & 2.d

Solar Project	Nameplate (MW)	Capacity Factor	Capacity Accreditation <sup>1</sup>	Project Status	
_		[PROTECTED DATA BEGINS	_		
Aurora Distributed Solar, LLC <sup>2,6</sup>	100 MW			existing	
North Star Solar PV, LLC <sup>2,7</sup>	100 MW			existing	
Marshall Solar, LLC 2,7	62.25 MW			existing	
			PROTECTED DATA ENDS]		
Community Solar Garden installations 2, 4, 5,8	various	15-20%	60%	planned	
Small Solar - RDF Projects	various	15-18%	54%	planned	
Small Solar (<=40 kW) <sup>8</sup>	various	10-18%	BTMG <sup>6</sup>	planned	
<u> </u>			·		

Information on Assumed Ca	pacity Factor					
8. Capacity factor reflects calendar y	ear 2019, for the 90th to t	he 10th percentile. Th	is includes all resource	s, not specific to 1st y	ear production.	

# Information on effective load carrying capability and MISO Capacity Accreditation

Capacity Accreditation represents an estimate of reliable resource capability during periods of system peak demand. The capacity accreditation is based on the reporting period of 1/1/2019 - 12/31/2019.

MISO has added Solar Accreditation practices to the Business Practice Manual for the 2019/20 Planning Year. For Year 1, solar resource accreditation will be 50% of nameplate rating; subsequent years the accreditation will be calculated based on historic operation data.

MISO BPM 11 - 4.2.3.1 Intermittent Generation and Dispatchable Intermittent Resources that are not powered by wind (example: run of river or solar) must supply MISO with the most recent consecutive three years of hourly net output (in MW) for hours ending 15, 16, and 17 EST from June, July and August. For new resources, or resources on qualified extended outage where data does not exist for some or all of the previous 36 historical months, a minimum of 30 consecutive days' worth of historical data during June, July or August for the hours ending 15, 16, and 17 EST must be provided prior to participating in the PRA.

- 1. The Company presumes that effective load carrying capability is addressed through the reporting of MISO's accreditation.
- 2. Capacity accreditation for Aurora Distributed Solar represents contractual agreement value. Capacity accreditation for other resources represent MISO first year of operation value.
- 4. Community Solar Garden installations are registered with MISO following COD.
- 5. Community Solar Garden and Solar Rewards installations continue to be added
- 6. Behind the meter generation
- 7. Capacity accreditation based on MISO PY 2019/2020 (to include EOY 2019)
- 8. Capacity factor reflects calendar year 2019, for the 90th to the 10th percentile. This includes all resources, not specific to 1st year production.

### 1.5% by 2020



### 10% by 2030



#### Carve Out

SREC Fullfillment and Bank w Add Pre-SES (2013), No RECs from Yrs 11-





