

Staff Briefing Papers

Meeting Date	January 6, 2021	Agenda Item *4
Company	Electric Utilities Subject to Minnesota's Solar Energy Standard, Minn. Stat. §216B.1691, Subd. 2f E999/M-20-464 E999/M-13-542	
Docket No.	In the Matter of Utilities' Annual Reports on Progress in Achieving the Solar Energy Standard In the Matter of the Implementation of Solar Energy Standards Pursuant to 2013 Amendments to Minnesota Statutes, Section 216B.1691	
Issues	<ol style="list-style-type: none"> 1. Should the Commission accept utilities 2019 SES Progress Reports? 2. What action should the Commission take on future SES Reporting? 	
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Relevant Documents	Date
Annual Reports	
Xcel Energy – <i>SES Report, Parts 1&2 (Public and Trade Secret)</i>	June 1, 2020
Minnesota Power – <i>SES Report (Public and Trade Secret)</i>	June 1, 2020
Otter Tail Power – <i>SES Report (Public and Trade Secret)</i>	June 1, 2020
Comments	
DOC DER	September 9, 2020
Otter Tail Power	September 28, 2020
Minnesota Power	September 28, 2020
Xcel Energy	October 8, 2020

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The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

Background

In 2013, legislation was passed which was codified as Minn. Stat. [§ 216B.1691, Subd. 2f](#), Minnesota's Solar Energy Standard (SES). The SES requires electric investor-owned utilities (IOUs) in Minnesota to procure 1.5% of their annual retail sales from solar energy. The statute also includes a 10% small-scale carve out for the SES and a goal of 10% solar energy by 2030. The statute excludes retail sales from some large industrial customers in certain manufacturing sectors (SES-exempt customers). SES compliance may be accomplished through installed solar generating facilities or the procurement of solar renewable energy credits (SRECs.)

That statute also states at Subd. 2f (g) that beginning in 2014 and through 2020, each of those utilities subject to the SES shall file a report with the Commission "reporting its progress in achieving the solar energy standard established under this subdivision."

In an Order issued April 25, 2014, in [Docket 13-542](#), the Commission established content requirements for utilities' annual Solar Energy Standards (SES) reports. The first reports were received in Docket 14-321, and the Commission's October 23, 2014 Order established additional content requirements for the annual SES reports.

In its November 28, 2016 Order in Docket 16-342, the Commission delegated authority to the Executive Secretary to develop a standardized form for future SES Reports.

In its October 20, 2017 Order in Docket 17-283, the Commission delegated authority to the Executive Secretary to eliminate outdated or duplicative questions from the reports, and to update the reports as necessary. The list of current reporting requirements can be found in Attachment A to these briefing papers.

On June 1, 2019 the three IOUs (Minnesota Power, Otter Tail Power, and Xcel Energy) submitted their annual reports. These are the final annual progress reports, and utilities will begin compliance with the SES for calendar year 2020.

Summary of 2019 SES Reports

The Department reviewed the annual reports, provided a summary of the utilities' efforts and recommended the Commission accept the reports as complete.

Staff agrees with the Department that the utilities have fulfilled their statutory reporting requirement, and recommends that the Commission accept these reports. This is included as **Decision Option 1**.

Xcel Energy

Xcel Energy reports ample SRECs and eligible solar capacity from generating facilities to meet the 2020 standard and beyond. This includes a mix of solar power purchase agreements (PPAs) with utility-scale facilities; Community Solar Gardens; and customer-sited solar from various incentive programs. Any SRECs accrued beyond what is necessary to satisfy the SES will be used for general Renewable Energy Standard (RES) compliance.

Table 1: 2019 SES Reporting Summary

	Minnesota Power	Otter Tail Power	Xcel Energy
Retail and Excluded Sales			
1. Annual MN retail sales for the reporting year (MWh)	9,014,804	2,678,956	29,161,074
2. Annual Excluded customer sales for the reporting year (MWh)	5,990,228	67,024	Protected Data
3. Annual Minnesota retail sales less exclusions (MWh)	3,024,575	2,611,932	Protected Data

Est. amount of solar generation required to meet 2020 SES	MW	MWh	MW	MWh	MW	MWh
1. Entire 1.5% Standard	27	46,012	30	40,000	235	424,441
2. Small Scale Carve-Out (10% of 1.5%)	3	4,601	3	4,000	31	42,444
3. 2030 Goal of 10%	180	306,749	200	272,000	1,509	2,621,515

Eligible Solar Capacity	Total	In MRETs	Total	In MRETs	Total	In MRETs
Less than 40kW (MW)	4.34	3.36	.521	27	53	25.51
Greater than 40kW (MW)	3.89	10	.080	1	687	927.88

Breakdown of SRECS - total balance (MWh)	2019	Total	2019	Total	2019	Total
Utility-owned solar projects	14,012	49,475	0	0	0	0
Solar Facilities that have entered into a PPA with the utility	0	0	0	0	398,736	1,291,688
Community Solar Gardens	1,616	3,348	0	0	822,713	1,538,593
Facilities under a net metering tariff						
a. Receiving an incentive (any type)	1,642	3,417	0	0	30,098	92,422
b. Not receiving an incentive	0	0	277	506	0	0
Other	0	0	0	0	7,276	17,701
Purchased (greater than 40kW)	0	-	75,253	-	0	-
Purchased (less than 40kW)	0	-	3,112	-	0	-
Total	17,386	56,644	78,642	¹	1,258,823	2,940,404

Minnesota Power

Minnesota Power expects to meet its 2020 SES requirements through a combination of banked SRECs and around 23 MW of company and customer installed solar capacity. Minnesota Power plans to meet the small scale solar carve out requirement through a combination of customer-sited solar installations and company solar gardens. The Company also files reports on its solar offerings as part of the annual SES report.

¹ Otter Tail did not report total banked SRECs

Otter Tail Power

Otter Tail Power (OTP) continues to work on its efforts to achieve the SES. As in previous years, the Company indicated it would primarily use purchased SRECs to meet its obligations.

However, when the report was filed OTP had not yet announced its Hoot Lake Solar plans. The nearly 50 MW Hoot Lake Solar facility, if approved, would provide the Company with SRECs for its SES obligations. In the short term, OTP will rely on SREC purchases.

While the company's SREC purchases will fulfill the majority of Otter Tail's SES requirements until a facility is cost effective, the Company reports the small-scale carve out of the standard remains a challenge. OTP does not have sufficient small-scale generation on its system to meet the carve out, and will rely on SREC purchases to meet the carve out.

Future SES Reporting

Minn. Stat. 216B.1691 requires annual reports on SES progress through 2020, when SES compliance begins. Accordingly, in this year's notice for comment, Staff issued a proposal to migrate existing SES reporting into the Renewable Energy Standard (RES) report, included as Attachment B to these briefing papers.

The Department made 3 minor recommendations to staff's proposal, which are included as part of **Decision Option 2**. Otter Tail supported Staff's proposal. Xcel also largely supported the proposal and the Department's recommendations.

Minnesota Power supported the majority of Staff's proposal, but requested the list of SES-exempt customers be reported in the RES reporting, instead of in the utility-specific SES cost exemption dockets.² Xcel indicated it has no preference for the location of SES-exempt customer reporting. Minnesota Power submits additional reporting materials with its SES reports on its other solar programs (SolarSense and its Community Solar Garden program). In the Staff proposal, these would move to the individual dockets for SolarSense and the MP CSG program. However, Minnesota Power objected to relocating its annual solar report to the program specific dockets, instead proposing to include it with its RES report, or in the SES exemption docket. Minnesota Power's recommendations are in **Decision Option 3**, which would be adopted in addition to Decision options 1 and 2.

Decision Option 4 is a second Minnesota Power's alternative if the Commission declines to adopt Decision Option 3.

Staff Analysis

On SES exemption reporting, Staff continues to recommend its original proposal. Staff expects the SES-exempt customer report would be an annual compliance filing for reference in the exemption dockets and would not come to the Commission for annual review/acceptance. Locating the information in the SES exemption dockets would be easier for any analysts and stakeholders working on that docket to easily access the information in that record.

On the other additional information provided by Minnesota Power, Staff does not agree that the RES reports are the appropriate place to migrate longer narrative form reporting, nor is the

² 15-773 for MP and 17-425 for Xcel. OTP has not yet made a similar filing.

MP solar exemption docket. Staff recommends the Commission require Minnesota Power to file its existing annual solar report in its SolarSense and CSG dockets. It is standard to have program specific reports filed in that program specific docket. This allows stakeholders to access the reports marking the progress of such programs. Currently, Minnesota Power stakeholders would have to follow the SES docket to receive the annual report for SolarSense or CSG, which many likely would not know about. Moving these reports to the RES report, which is a multi-utility docket, or the SES cost exemption docket, would add an additional layer of confusion for stakeholders looking for an annual program report.

Staff supports the Department's recommendations, and can update the proposed RES template accordingly. Staff's recommendation for future SES reporting is captured in **Decision Option 2**. Staff recommends adopting **Decision Options 1 and 2**.

Decision Options

1. Accept the utilities' 2019 Solar Energy Standard reports. (*Department, Staff, MP, OTP, Xcel*)
2. Adopt Staff's reporting recommendations (Attachment B), with the following modifications:
 - a. reporting annual solar generation on the utilities' system for the pervious calendar year should be broken down between facilities with 40 kW capacity or less, and those over 40 kW
 - b. report generation from eligible CSG subscriptions
 - c. summaries of ongoing efforts to obtain solar energy, progress toward compliance with the 10 percent small-scale solar carve out, and efforts to reach the 10 percent goal by 2030 should be included in the biennial reporting. (*Staff, Department, Xcel*)

AND (*Minnesota Power recommendation*)

3. Adopt the of following additional reporting modifications to staff's recommendations (Attachment B): (*Minnesota Power*)
 - a. Require utilities to file the following information in the RES annual reports instead of the SES exemption docket:
 - i. Annual excluded customer sales for the previous calendar year
 - ii. A list of customers requesting exclusion from the requirements of the SES, the North American Industry Classification System (NAICS) code associated with their manufacturing activity, and their annual kWh usage
 - b. Allow Minnesota Power to file its annual solar program reports in the SES cost exemption docket in the annual RES docket
4. If the Commission requires separate reporting in the SES cost exemption docket (15-773), allow Minnesota Power to file its annual solar program reports in that docket. (*Minnesota Power, alternative*)

Attachment A: Existing SES Reporting Requirements

From April 25, 2014 Order, Ordering Paragraphs 4 and 5

1. Annual Minnesota retail sales for the previous calendar year
2. Annual excluded customer sales for the previous calendar year
3. A list of customers requesting exclusion from the requirements of the SES, the North American Industry Classification System (NAICS) code associated with their manufacturing activity, and their annual kWh usage
4. The total Minnesota retail sales for customers excluded from the SES requirement
5. Annual solar generation on the utilities' system for the previous calendar year, including the total number of units registered in M-RETS to that utility and SRECs generated in the past year from those units
6. Estimated amount of solar generation (expressed as capacity) a utility would be required to obtain in 2020
7. Estimated solar energy requirements to meet the SES in 2020
8. A short summary of ongoing efforts to obtain solar energy, including a brief summary of the anticipated mix of project sizes for SES compliance
9. A summary of progress toward compliance with the ten percent carve out for systems under 20 kW
10. A brief summary of the state(s) in which the solar generation is located or anticipated to be located
11. Purchases and sales of SRECs to meet the SES
12. The SES annual reports shall also include a breakdown of SRECs, identifying which credits were associated with each of the following:
 - a. Facilities receiving a Value of Solar rate;
 - b. Community Solar Gardens;
 - c. Facilities under a net metering tariff;
 - d. Utility-owned solar projects;
 - e. Solar facilities that have entered into a purchased power agreement with the utility;
 - f. Facilities receiving an incentive, such as Solar Rewards or Made in Minnesota.

From October 23, 2014 [Order](#) Accepting SES Reports

13. Information on the effective load carrying capability and MISO capacity accreditation for existing or planned solar facilities

From November 28, 2016 Order Accepting SES Reports

14. Discussion on the utilities' efforts to reach, by 2030, the energy goal that ten percent of the retail electric sales in Minnesota be generated by solar energy.

From October 20, 2017 [Order](#) Accepting SES Reports

15. In its next report, Otter Tail must outline a specific plan for compliance with the Solar Energy Standard small-scale obligation, including any one or more of the following: anticipated yearly capacity installations for small-scale solar facilities, a plan for a Community Solar Garden, or specific facilities for small SREC purchases.
16. The Commission hereby delegates to the Executive Secretary the authority to modify the SES reporting form used by utilities to eliminate outdated questions and update information as needed.

Attachment B: Staff Proposal – Future SES Reporting

From April 25, 2014 Order, Ordering Paragraphs 4 and 5

1. Annual Minnesota retail sales for the previous calendar year
[Incorporated into RES Report \(-12 dockets\)](#)
2. Annual excluded customer sales for the previous calendar year
3. A list of customers requesting exclusion from the requirements of the SES, the North American Industry Classification System (NAICS) code associated with their manufacturing activity, and their annual kWh usage

[Move both 2 and 3 to utility-specific SES cost exemption dockets:](#)

- a. Minnesota Power shall include all relevant information, including but not limited to the total costs that have been apportioned to and recovered from solar-paying (nonexempt) customers under Minn. Stat. § 216B.1691, subd. 2f(f), that would have been recovered from exempt customers in its annual reports in Docket 15-773.
- b. Xcel Energy shall include all relevant information, including but not limited to the total costs that have been apportioned to and recovered from solar-paying (non-exempt) customers under Minn. Stat. § 216B.1691, subd. 2f(f), that would have been recovered from exempt customers in its annual reports in Docket 17-425.
- c. Otter Tail Power shall include all relevant information, including but not limited to the total costs that have been apportioned to and recovered from solar-paying (non-exempt) customers under Minn. Stat. § 216B.1691, subd. 2f(f), that would have been recovered from exempt customers in its annual reports in any future Solar Cost Exemption docket.

4. The total Minnesota retail sales for customers excluded from the SES requirement
[Incorporated into new tab titled “4. SES Retail Sales” in RES Reporting Template](#)

5. Annual solar generation on the utilities’ system for the previous calendar year, including the total number of units registered in M-RETS to that utility and SRECs generated in the past year from those units

[Incorporated into new “4. SES Retail Sales” in RES Reporting Template](#)

6. Estimated amount of solar generation (expressed as capacity) a utility would be required to obtain in 2020

7. Estimated solar energy requirements to meet the SES in 2020

[Propose to eliminate 6 and 7 – no longer necessary](#)

8. A short summary of ongoing efforts to obtain solar energy, including a brief summary of the anticipated mix of project sizes for SES compliance
9. A summary of progress toward compliance with the ten percent carve out for systems under 20 kW

[Incorporated 8 and 9 into new “4. SES Retail Sales” in RES Reporting Template](#)

10. A brief summary of the state(s) in which the solar generation is located or anticipated to be located

Propose to eliminate

11. Purchases and sales of SRECs to meet the SES

Incorporated under “7. REC Purchase & Sales” biennial reporting

12. The SES annual reports shall also include a breakdown of SRECs, identifying which credits were associated with each of the following:

- a. Facilities receiving a Value of Solar rate;
- b. Community Solar Gardens;
- c. Facilities under a net metering tariff;
- d. Utility-owned solar projects;
- e. Solar facilities that have entered into a purchased power agreement with the utility;
- f. Facilities receiving an incentive, such as Solar Rewards or Made in Minnesota.

Propose to eliminate

From October 23, 2014 Order Accepting SES Reports

13. Information on the effective load carrying capability and MISO capacity accreditation for existing or planned solar facilities.

Propose to eliminate

From November 28, 2016 Order Accepting SES Reports

14. Discussion on the utilities’ efforts to reach, by 2030, the energy goal that ten percent of the retail electric sales in Minnesota be generated by solar energy.

Incorporated into new “4. SES Retail Sales” in RES Reporting Template

From October 20, 2017 Order Accepting SES Reports

15. In its next report, Otter Tail must outline a specific plan for compliance with the Solar Energy Standard small-scale obligation, including any one or more of the following: anticipated yearly capacity installations for small-scale solar facilities, a plan for a Community Solar Garden, or specific facilities for small SREC purchases.
16. The Commission hereby delegates to the Executive Secretary the authority to modify the SES reporting form used by utilities to eliminate outdated questions and update information as needed.

Propose to eliminate

Additionally, Minnesota Power includes reports relating to two solar programs: its SolarSense program (Docket 16-485) and its Community Solar Garden program (Docket 15-825). Staff proposes Minnesota Power file these reports in their respective dockets.