

Minnesota Public Utilities Commission

Staff Briefing Papers

Meeting Dates: November 3, 2016**Agenda Item #5

Company: Electric Utilities Subject to Minnesota's Solar Energy Standard, Minn. Stat. [§216B.1691, Subd. 2f](#)

Docket No. **E999/M-16-342**
E999/CI-13-542

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

Issue: What action should the Commission take on the utilities' third annual solar energy standard reports?

Should the Commission take any other actions?

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Relevant Documents

Commission, Notice of Comment and Reporting Period..... May 20, 2016
Interstate Power and Light, Report May 25, 2016
Otter Tail Power, Report May 26, 2016
Interstate Power and Light, Report May 31, 2016
Minnesota Power, Report (public and trade secret)..... June 1, 2016
Xcel Energy, Report June 1, 2016
Department of Commerce, Comments..... June 23, 2016
Otter Tail Power, Reply Comments July 14, 2016
Public Comment..... July 19, 2016

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.

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I. Statement of the Issue

What action should the Commission take on the utilities' reports?

Should the Commission take any other actions?

II. Introduction and 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 in Minnesota to procure 1.5% of their annual retail sales from solar energy.

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."¹

The plain text of the statute gives little guidance on the information that should be in the reports, as long as it relates to a utility reporting its progress in achieving the solar standard. Therefore, the Commission solicited comments in [Docket E999/CI-13-542](#) on the content of the reports.

In two orders, the Commission outlined the information to be included in the reports. Staff has compiled those requirements here:

In an April 25, 2014 [Order](#) in that docket, the Commission established the content of those reports at Ordering Paragraphs 4 and 5:

Complete SES Reporting Requirements
From April 25, 2014 Order, Ordering Paragraphs 4 and 5
Annual Minnesota retail sales for the previous calendar year
Annual excluded customer sales for the previous calendar year
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
The total Minnesota retail sales for customers excluded from the SES requirement
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 S-RECs generated in the past year from those units
Estimated amount of solar generation (expressed as capacity) a utility would be required to obtain in 2020

¹ The statute requires the reports to be filed by July 1 of each year. However, as is explained further, the Commission established the reports to be due by June 1 of each year, which no utility objected to. The June 1 deadline was chosen because other reports required as part of the RES are due June 1.

Estimated solar energy requirements to meet the SES in 2020
A short summary of ongoing efforts to obtain solar energy, including a brief summary of the anticipated mix of project sizes for SES compliance
A summary of progress toward compliance with the ten percent carve out for systems under 20 kW;
A brief summary of the state(s) in which the solar generation is located or anticipated to be located
Purchases and sales of S-RECs to meet the SES
The SES annual reports shall also include a breakdown of S-RECs, identifying which credits were associated with each of the following: <ul style="list-style-type: none"> • Facilities receiving a Value of Solar rate; • Community Solar Gardens; • Facilities under a net metering tariff; • Utility-owned solar projects; • Solar facilities that have entered into a purchased power agreement with the utility; and • Facilities receiving an incentive, such as Solar Rewards or Made in Minnesota.
From October 23, 2014 Order Accepting SES Reports
Excluded sales only from customers that have requested and been approved by utilities for exclusion from the Solar Energy Standards requirements
Additional information supporting each utility's assumed capacity factor
More detailed information on each utility's ongoing efforts to obtain solar energy on their systems
Information on the effective load carrying capability and MISO capacity accreditation for existing or planned solar facilities
Additional discussion on any challenges utilities face in registering small solar facilities
A discussion of how utilities weigh the uncertainty of the solar investment tax credit benefit to awaiting the potential for technology improvements which may reduce the costs of adding solar resources

III. Utility Reports

Xcel, Minnesota Power (MP), Otter Tail Power (OTP), and Interstate Power and Light (IPL) each filed reports. IPL filed a status report through July 31 of 2015, at which date it no longer operated as a public utility in the state of Minnesota and as such is no longer subject to the SES.²

The Department provided a helpful table summarizing the numerical reporting in the utilities' reports³:

² See ORDER APPROVING AGREEMENT SUBJECT TO CONDITIONS, Issued June 8, 2015, Docket No E001 et. al/PA-14-322.

³ Department June 23, 2016 Comments, page 5.

Table 1: Summary of Utility Reporting on SES

	IPL	Otter Tail	Minnesota Power	Xcel
2014 MN retail sales (MWh)	485,440	2,383,370	8,424,680	30,300,578
Excluded Sales	6,993	0 at this point, but est. 84,632 MWh for 2020	5,224,141	First request for excl. received April 2016
Annual solar generation (MWh)	0	96		
Est. solar capacity (MWs) needed to meet 2020 SES	0	30	32	262.25 ⁴
Breakdown of Solar RECs Generated after 8/1/2013: No. of facilities (Capacity kW)				
a. Receiving Value of Solar		0	0	0
b. Community Solar Gardens		0	0	0
c. Facilities under net metering		18 customers, 166 kW, 96 MWh, 46 MWh customer retained the SRECs	153 customers, does not receive SRECs if not inventive program	Reflected in f. below
d. Utility-owned		0	0	0
e. Solar PPA		0	0	0
f. Incentive Program			39 small scale & 38 lg. scale SRECs	4,766 SRECs

Staff highlights a few items below that were mentioned in the reports:

- Xcel notes that by the end of 2016 it will have enough generation online to provide sufficient banked SRECs to meet compliance in 2020 and beyond.⁵
- OTP continues to indicate that it will have difficulty meeting the small scale carve out for systems less than 20kW.⁶
- Starting in 2015 MP requires all SolarSense customers to transfer SRECs to the company for compliance with the small scale carve out.⁷

⁴ Xcel does not state the amount that would be required, only that it will have sufficient amounts

⁵ Xcel June 1, 2015 SES report, pages 3-4

⁶ OTP May 26, 2015 SES report, page 2

⁷ MP June 1, 2015 SES Report, page 10

Comments in Response to the Utility Reports

Only the Department filed comments on the utility reports; no one filed reply comments. The Department stated it has reviewed the annual SES reports and has concluded that they include the requested information and comply with the Commission's Orders.

IV. Staff discussion

Staff agrees for the most part with the Department that the utilities have provided the requested information in compliance with the Commission's Orders. However, Staff would like to see more specific information from OTP and MP on how they plan to meet the 10 percent carve-out for systems under 20kW in the next annual report. Both utilities have indicated in current and past reports that they foresee difficulties in meeting the carve out and more specificity on actions taken to remedy this problem or proposed options for compliance would provide clarity.

Two utilities, OTP and MP, referenced the possibility of out of state solar facilities being used to count towards Minnesota's SES. While neither appeared to have any specific plans to build out of state facilities or purchase S-RECs from outside the state, staff notes that there is no requirement that the solar used to meet the SES be in-state.⁸

In Xcel's February 12, 2016 update to its 2014 SES report there were several helpful graphs in attachments A, B, and C that illustrated compliance with various sections of the standard and the 2030 Goal. Staff appreciates these graphs and encourages all utilities to include them in future filings.

Staff recommends that since the Investment Tax Credit (ITC) has been extended at 30% through the end of 2019, information related to the uncertainty of the ITC can be amended to a discussion of how utilities plan to use the current solar investment tax credit benefits to lower solar costs, and if not, why they believe that waiting may reduce the costs of adding solar resources. Include details on the risks of higher compliance costs to customers if solar prices were not to fall and the ITC expires, and the uncertainty of Midwest SREC market prices and availability if procurement was necessary for compliance with the Standard.

While all utilities fulfill the reporting requirements, there is some variation in how the information is provided. Staff would like to suggest that future reports have a standardized reporting format in order to simplify review of SES compliance and make year to year

⁸ See, for example, the Commission's April 25, 2014 Order in Docket E999/CI-13-542, Ordering Paragraph 3: "Solar renewable energy credits attributable to generation facilities located outside Minnesota shall have a shelf life identical to the shelf life of credits attributable to Minnesota facilities," and Ordering Paragraph 6: "All S-RECs must be generated from facilities registered in M-RETS to be eligible for SES compliance." The order specifically references out-of-state RECs, and only requires facilities to be registered in M-RETS, not located in the state, in order to be eligible.

comparisons simpler. Design of forms could be based on past utility reports and done in consultation with the utilities and the Department.

Staff has also included a decision option slightly altering the Department's recommendation. The Department stated, "The Department recommends the Commission find the SES Reports in compliance with its Orders." While staff has no concerns with this language, the Commission used different language in last year's Order on the SES reports, which was "The Commission accepts utilities' 2014 Solar Energy Standard reports as complete." For consistency purposes, it may make sense to use the same Ordering language as last year. However, staff believes the Department's language is reasonable and does not oppose using the Department language if preferred by the Commission.

V. Decision Options

A. SES Reports

1. Find the SES reports in compliance with the Commission's Orders.
(*Department language*) or;
2. Accept the utilities' 2015 Solar Energy Standard reports as complete.
(*Language used in last year's SES docket*)

B. Future Process of SES Reports

1. Delegate the authority to the executive secretary to develop a standardized form for future SES reports in consultation with the Department and utilities. The executive secretary may also update the standardized form in future years as necessary.