

Minnesota Public Utilities Commission

Staff Briefing Papers

Meeting Date: October 9, 2014.....Agenda Item #6

Company: Electric Utilities Subject to Minnesota’s Solar Energy Standard, Minn. Stat. §216B.1691, subd. 2f

Docket No. **E999/M-14-321**
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’ first solar energy standard reports?

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Relevant Documents

Commission, *Order (Docket 13-542)* April 25, 2014
Otter Tail Power Company, *Report* May 30, 2014
Interstate Power and Light, *Report* June 2, 2014
Xcel Energy, *Report*..... June 2, 2014
Minnesota Power, *Report*..... June 6, 2014
Department of Commerce, *Comments* June 30, 2014
Minnesota Power, *Reply Comments* July 9, 2014
Xcel Energy, *Reply Comments* July 11, 2014
IPL, *Letter in Lieu of Reply Comments*..... July 11, 2014

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Statement of the issue

What action should the Commission take on the utilities' first solar energy standard reports?

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 an April 25, 2014 Order in that docket, the Commission established the content of those reports at Ordering Paragraphs 4 and 5:

The Commission hereby delegates authority to the Executive Secretary to issue a notice listing the reporting requirements set forth below for the SES, in a separate docket:

- A. Annual Minnesota retail sales for the previous calendar year;*
- B. Annual excluded customer sales for the previous calendar year;*
- C. 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; north American industry*
- D. The total Minnesota retail sales for customers excluded from the SES requirement;*
- E. 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;*
- F. 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.

G. Estimated solar energy requirements to meet the SES in 2020;

H. A short summary of ongoing efforts to obtain solar energy, including a brief summary of the anticipated mix of project sizes for SES compliance;

I. A summary of progress toward compliance with the ten percent carve out for systems under 20 kW;

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

K. Purchases and sales of S-RECs to meet the SES.

5. By June 1 of each year, utilities shall file SES annual reports in the docket established above. The SES annual reports shall also include a breakdown of S-RECs, identifying which credits were associated with each of the following:

- *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.*

The Commission Order also stated, “the information to be submitted may need to be revised and adapted over time, as Minnesota experiences solar market growth and gains more experience in tracking utility performance toward the 2020 standard.”²

Staff Comment

The legislation sets this up as a forward looking report—a report only required during the timeframe that utilities are preparing and working towards meeting the SES, and then ending in 2020. IRPs are also forward looking processes and staff is continually seeking input on how both documents can complement rather than unnecessarily duplicate each other. Any stakeholder with ideas on how to enhance these reports should feel free to provide their input.

Reports

Between May 30 and June 6, in response to the Notice issued by the Commission, the utilities filed their reports. Each report appears to include the information required by Order and is fairly concise, so staff has not repeated the reports’ content verbatim here. Some highlights from the reports are:

- Some utilities reported content differently. For example, three utilities reported estimated excluded customer sales and one did not.

² April 25, 2014 Order, page 4.

- Xcel adjusted its estimated solar generation (expressed as capacity) that it would need to obtain in 2020, from 300 MW to 200 MW (100 MW of utility-scale solar and 100 MW of small and medium scale solar).³
- Xcel stated it expects to have up to 200 MW of utility scale solar under PPA contracts by end of 2014, with expected in-service dates in the 2016 time frame.
- MP has 138 solar net metered customers in its territory, but because those customers do not have production meters installed, that solar generation is not registered in M-RETS and is not generating solar RECs. OTP had a similar experience; it has 11 net metered customers but no small solar facilities registered in M-RETS⁴. OTP notes that meeting the requirement in the SES for small systems could be a challenge.
- Reports were understandably brief, with utilities noting that they will be able to provide additional information in later years as plans are further developed.

Party Comments

The Department of Commerce (Department or DOC) was the only party to file comments on the utility reports.

The Department reviewed the reports and concluded that they were complete but had recommendations for future reports:

- 1) Three of the four utilities filing reports (OTP, IPL and MP) each listed estimated excluded customer sales even though no customers had requested exemption as of the date of the report. The Department concluded that for future reports, the utilities should only list excluded sales associated with customer that have requested and been approved for exclusion from the SES requirements.
- 2) The utilities' solar capacity assumptions ranged from 15 to 20.4 percent. The Department recommended that in the next annual SES report utilities include more information supporting their assumed capacity factor.
- 3) Utilities reported the solar on their system in different ways: MP, OTP, and IPL listed the solar on their system even though those units were not registered in M-RETS and not generating RECs (and therefore not eligible to help the utility meet the SES). The Department asked that the Commission clarify the intent of this reporting requirement, since utilities are also required to list the solar RECs generated under different tariffs and utility programs.
- 4) While noting that it was understandable that utilities did not have much detail on their plans to meet the standard yet, the Department recommended more detail in the next annual SES report.

³ This change was due to the Commission's confirmation of the SES statute that there was a longer shelf life for solar RECs generated between August 2013 and January 2020. This finding was also made in the April 25, 2014 Order in Docket 13-542.

⁴ Four of those customers are on tariffed rates where the customer has elected to keep the RECs.

- 5) The Department, responding to the Commission's notice in this docket, stated that it would use the information in these reports to use in its biennial report to the legislature required by Minn. Stat. §216B.1691, subd. 3.⁵
- 6) The Department did not think it necessary to formally approve the reports since the SES requirements do not take effect until 2020. Instead, the Department recommends the Commission accept the reports with the additional clarifications and modifications recommended in its comments.

MP, Xcel, and IPL each filed letters agreeing with the Department's recommendations.⁶

Staff Analysis

Staff agrees with the Department's conclusions. Each of the Department's conclusions is listed as a decision option below with the exception of conclusion #5, which is a commitment by the Department to incorporate these reports into its legislative report and need not be in an Ordering Paragraph.

Staff has comments on three other items.

First, staff sees these reports as informational at this time, so acceptance of the reports, rather than approval, is appropriate.

One additional piece of content could be to require the next reports to include the effective load carrying capacity (ELCC) of its solar facilities, or, if the facilities are registered with MISO, the MISO capacity accreditation. This is different from the capacity factor already provided. While the capacity factor is important for the SES, because the SES is an energy-based standard, the ELCC, and particularly the capacity accreditation for utility-scale projects, might help inform stakeholders and the Commission as it is examining solar projects as a resource option in IRP. As an example, in the Xcel Competitive Acquisition Docket (12-1240), the capacity accreditation number was of interest, and in dispute. As more utility-scale solar is pursued, understanding capacity accreditations will be increasingly important.

Second, both OTP and MP note that they have no small scale solar registered in M-RETS generating RECs at this time. As the Commission is aware, ten percent of the SES must be met with solar energy from facilities with a nameplate capacity of 20 kW or less. The lack of small units for MP and OTP appears to be for a number of reasons: production meters are generally required to register units and produce RECs (existing net metered customers do not necessarily have production meters installed); in addition, the Commission's decision in its REC ownership

⁵ The Department's biennial legislative report is typically filed with the Commission as part of its biennial look at utility RES compliance.

⁶ Xcel additionally provided its capacity factor, which was not in its original report. Its capacity factor of 17 percent was within the range of the percentages provided by the other utilities.

docket gave RECs under net metering arrangements to the generator, not the utility.⁷ There is also quite a bit of administrative work necessary to register units; for smaller installations, the administrative costs may outweigh the financial benefit of registering the S-RECs. In response to a staff e-mail, OTP suggested some type of aggregation or consolidation efforts to register these small units.

Because there may be some challenges utilities will face in meeting the “small solar” piece of the SES, including challenges not entirely within the utilities’ control, staff suggests that the utilities provide additional discussion in their next annual SES report on this topic. As with the other aspects of this report, the discussion would be informational and allow the Commission and stakeholders to monitor the issue.

Finally, the Department asked for a clarification on one component of the report: the purpose of reporting RECs by incentive program and tariff versus some utilities reporting the solar on their system that is not registered in M-RETS. Staff believes both pieces of information are required by Order and are useful: the reporting of S-RECs by program and tariff are required by Ordering Paragraph 5, and Ordering Paragraph 4.I. requires “a summary of progress toward compliance with the ten percent carve out for systems under 20 kW.” The reason the Commission chose to require utilities to report solar RECs generated by program to see whether certain programs or tariffs seem to be more successful in generating solar energy for the SES. Likewise, MP and OTP’s reporting of the solar on their system but not registered in M-RETS is equally useful because it may reveal challenges to meeting the SES that the Commission or others may identify a solution to. The applicable statute does require utilities to identify obstacles to meeting the standard, and solutions to those obstacles.⁸

⁷ Docket E999/CI-13-720, ORDER DETERMINING RENEWABLE ENERGY CREDIT OWNERSHIP UNDER MINN. STAT. §216B.164, Issued July 22, 2014. Typically documentation must be obtained demonstrating the right to register the facility in M-RETS, separate from a Commission decision stating who owns the RECs.

⁸ Minn. Stat. §216B.1691, subd. 3(a)(3) and (4).

Decision Options

Department Recommendations

- 1) Accept the 2013 SES utilities' reports as complete;
- 2) Direct the utilities subject to the solar energy standard to submit next year's reports by June 1, 2015 and include in these reports:
 - a) Excluded sales only from customers that have requested and been approved for exclusion from the solar energy standards requirements;
 - b) More information supporting their assumed capacity factor; and
 - c) More detailed information on their ongoing efforts to obtain solar energy on their systems.

Potential Additional Decision Options

- 3) Direct utilities in their next annual SES reports to include information on the effective load carrying capability and MISO capacity accreditation for existing or planned solar facilities.
- 4) Direct utilities in their next annual SES reports to include additional discussion on any challenges they face in registering small solar facilities.
- 5) Direct utilities in their next annual SES reports to include a discussion of how they are weighing the uncertainty of the solar investment tax credit (ITC) benefit to awaiting the potential for technology improvements which may reduce the costs of adding solar resources.
- 6) Request utilities or stakeholders provide staff with input on how to improve future SES annual reports.

Staff Recommendations

Staff believes all of the above decision options are reasonable.