

Staff Briefing Papers

Meeting Date April 15, 2021 Agenda Item 4*

Company Minnesota Power

Docket No. **E-015/M-20-557**

In the Matter of the Petition by Minnesota Power for Approval of its 2020 Solar Renewable Factor within its Renewable Resources Rider

Issues

1. Should the Commission approve Minnesota Power’s 2020 Solar Factor and authorize recovery of expenses for the period 2016-2020?
2. Has Minnesota Power appropriately allocated costs to customer classes for the 2020 Solar Factor of the Renewable Resources Rider?

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Relevant Documents

Date

Minnesota Power – Initial Filing (TS)	June 30, 2020
Department of Commerce – Comments	August 31, 2020
Minnesota Power – Reply Comments	September 11, 2020
Department of Commerce – Response to Reply Comments	September 21, 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.

I. Statement of the Issues

- Should the Commission approve Minnesota Power's 2020 Solar Factor and authorize recovery of expenses for the period 2016-2020?
- Has Minnesota Power appropriately allocated costs to customer classes for the 2020 Solar Factor of the Renewable Resources Rider?

II. Background and Petition

Minnesota Power is seeking approval to recover costs pursuant to four Commission Orders regarding solar energy projects undertaken under Minn. Stat. § 216B.1645, subd. 2a and Minn. Stat. § 216B.1691, subd. 2f(f). Minn. Stat. §216B.1645, subd. 2a allows a utility to petition the commission for approval of a rate schedule that provides for the automatic adjustment of charges to recover prudently incurred investments, expenses, or costs associated with facilities constructed, owned, or operated by a utility to satisfy the requirements of section § 216B.1691, provided these facilities were approved by the commission under § 216B.2422, § 216B.243, or were determined reasonable and prudent under § 216B.243, subd. 9.

Minn. Stat. § 216B.1691 holds that each public utility shall generate or procure sufficient electricity generated by solar energy to serve its retail electricity customers in Minnesota such that at least 1.5% of the utility's total retail electric sales is generated by solar energy, excluding iron mining extraction and processing facilities (including scam mining facilities) and paper mills, wood products manufacturers, sawmills, and oriented strand board manufacturers (SES-Exempt) from both calculation of total sales and from any rates charged to recover these costs.

Minnesota Power is filing for recovery for the following projects:

- The Camp Ripley Solar Project is a 10 MW solar facility located on Camp Ripley, near Little Falls. Construction took place in 2016, and it began commercial operations in November, 2016. It generates on average approximately 16,000 to 17,000 MWh per year. MP is seeking recovery of actual project costs from 2016 through 2019, and projected costs for 2020.
- The Community Solar Garden Solar Array is a 40 kW solar array in Duluth, adjacent to MP's Herbert Service Center. The project went 'live' in December 2016, and participants began receiving bill credits for the program in early 2018. It generates between 50 MWh and 66 MWh in the average year. The site also includes a pollinator habitat restoration project. MP is requesting recovery of actual 2016 through 2019 costs, and projected 2020 costs.
- MP's SolarSense rebate project was undertaken beginning in 2004, before the SES was created. MP is requesting recovery of SolarSense costs beginning in 2017, four years after the SES was enacted. The Commission's February 10, 2017 Order in Docket No. E-015/M-16-485 (*In the Matter of the Petition for Approval of Minnesota*

Power's New SolarSense Customer Solar Program) authorized MP to reallocate cost recovery for this program from the Conservation Improvement Program (CIP) to the Solar Factor.

In total, MP is requesting recovery of \$2,983,909 for SolarSense through this filing.

TABLE 1 – Cost Recovery by Project

Project	2016	2017	2018	2019	2020	Total Costs
Camp Ripley	\$358,125	\$1,768,424	\$1,706,936	\$1,704,845	\$1,612,013	\$7,150,343
Solar Garden	Total Net of Revenues					\$16,984
SolarSense		\$389,593	\$575,745	\$1,107,890	\$910,681	\$2,983,909
Total Costs						\$10,151,236

A. Camp Ripley Project Allocation

Allocation of the Camp Ripley project costs was developed during the 2016 Minnesota Power Rate Case.¹ Allen Gleckner laid out the proposed allocation and benefits calculation methodology. In Surrebuttal,² Department witness Stephen Collins agreed with MP's benefit calculations and recommended that benefits be allocated using the MISO Coincident Peak (CP) demand, which is the methodology used in this filing by MP. Benefits are removed from SES-Exempt customers and credited to SES-Paying customers based on each class's annual MISO CP demand. This capacity benefit credit is netted against SES-paying customer classes' revenue requirements and is added as a charge to SES-Exempt customers.

B. Rate Calculation and Customer Impact

MP is billing this rider on a per kwh basis to customers affected by the program. This rider would cost residential customers \$0.00301 per kwh, which is a 2.8% increase in average current rate, with an average bill impact of \$2.18 per month for residential customers.

MP is implementing separate trackers for the SES-Paying and SES-Exempt classes, to remain in compliance with the statutory requirement that certain customer classes be exempt from this program. SES-Exempt customers will only pay for the credit that reallocate capacity benefits from these programs away from those customers to the SES-Paying customers, to comply with the statutory mandate that Exempt customer groups neither pay for these programs nor will program mandates be calculated based on these customers' usage.

Table 2: Customer Impact of SES on Bills

Rate Class	Rate Per kwh	Increase (%)	Impact (\$ per Month)
Residential	\$0.00301	2.8%	\$2.18
General Service	\$0.00278	2.59%	\$7.60
LL&P (SES-Paying)	\$0.00323	3.96%	793.24

¹ Docket E-15/GR-16-664, Direct Testimony of Allen Gleckner, May 31, 2017.

² Surrebuttal Testimony of Stephen Collins, July 21, 2017.

Rate Class	Rate Per kwh	Increase (%)	Impact (\$ per Month)
LL&P (SES-Exempt)	\$0.00014	0.17%	\$52.90
Large Power (SES-Exempt)	\$0.00014	0.22%	\$7,098
Lighting	\$0.00349	2.17%	\$1.18

III. Parties' Comments

A. Department of Commerce - Comments

On August 31, 2020, the Department of Commerce, Division of Energy Resources (Department) filed its comments on this petition. The Department notes that, due to the proposed recovery of multiple years of costs through this rider, implementation of this rider in a single year would be a rate increase equivalent to 80% of the increase found in the most recent rate case. And, when combined with the requested increase for the Transmission Cost Recovery Rider, in Docket M-19-440, these two rider increases account for over 3 times the approved revenue increase in MP's last rate case.³ Due to this significant effect on ratepayers, the Department recommends that MP be required to recover the costs associated with Camp Ripley over 5 years, rather than in a single year as contemplated by the MP petition. If these costs are spread over 5 years, the Department would find it acceptable to collect the (relatively small) costs associated with the Solar Garden over 1 year. Similarly, the Department does not oppose collecting the SolarSense Program Revenues over one year if the Commission adopts the recommendation to collect Camp Ripley over five years.

The Department also requests that MP provide in its reply comments a summary of its SolarSense 2020 projected costs matching the format used by the Department in its table on page 11 of the Department Comments.

The Department requested that MP explain its proposal to use an energy charge, rather than a capacity charge, for assessing Solar-Exempt customers for the solar capacity benefit. The Department reasons that capacity costs are usually billed on a per kw basis, and so on the surface it would appear more appropriate to use a demand (per kw) billing determinant for a charge related to capacity.

The Department requests that in its reply comments, Minnesota Power file amended revenue requirements and rate calculations reflecting a five-year recovery time for Camp Ripley.

The Department recommends that MP provide language in its Reply Comments for a customer bill notification to advise ratepayers of the additional charge related to implementation of this Factor. The Department recommends that MP's requested effective date of January 1, 2021 be approved.

³ Department Comments, Page 8 and 9.

B. Minnesota Power - Reply Comments

In its reply comments of September 11, 2020, MP provided the information requested by the Department, including the breakdown of SolarSense Program revenues. MP also updated its 2020 projected revenue requirements in the SolarSense and Camp Ripley Programs, and provided updated cost recovery for 1-year, 3-year, and 5-year timelines on recovering the Camp Ripley costs. These options are summarized in the table below.

MP explained that it chose a per kWh charge for its SES-Exempt capacity claw-back primarily for simplicity. The Company would support using a demand charge if costs were higher, but notes that if it recovered its LLP benefit over five years, the billable rate would round to \$0.00 per kW rate, and the Large Power rate would be about \$0.02 per kW. Using an energy charge would allow a more precise recovery of the revenue requirement, reducing the risk of over or under-recovery of costs.

MP provided language it suggests for an on-bill (bill message) notification of customers:

The Solar Renewable Rider has been approved by the MPUC per Docket No. E-015/M-20-557 effective XX-XX-2021 and is reflected in your billing statement. The Solar Renewable Rider is X.XXX Cents per kilowatt-hour (kWh).

**Table 3: Customer Impact of SES on Bills
(SES – Nonexempt Customers)**

	A	B	C	D
Rate Class	Initial Request per kWh	Rate Per kWh – 1 Year Recovery	Rate per kWh - 3 year Recovery	Rate per kWh – 5 year Recovery
Residential	\$0.00301	\$0.00302	\$0.00166	\$0.00139
General Service	\$0.00278	\$0.00280	\$0.00155	\$0.00130
LL&P (SES-Paying)	\$0.00323	\$0.00325	\$0.00178	\$0.00148
LL&P (SES-Exempt)	\$0.00014	\$0.00014	\$0.00005	\$0.00003
Large Power (SES-Exempt)	\$0.00014	\$0.00014	\$0.00005	\$0.00003
Lighting	\$0.00349	\$0.00351	\$0.00187	\$0.00154

Minnesota Power continues to request approval of its SES factor as proposed, with a one-year recovery period, but is providing the 3-year and 5-year recovery calculations to provide the Commission with alternatives for its decisions. Minnesota Power states that it does not oppose a 3-year cost recovery period for the Camp Ripley project.

C. Department - Reply Comments

The Department reviewed the MP petition and reply comments, and proposed the following recommendations:

1. Approve MP's requested 2016-2020 revenue requirements for the Camp Ripley solar facility (\$7,150,343), Community Solar Garden Pilot (\$16,974), and Solar Sense

- Program (\$3,038,222), but require MP to recover the requested Camp Ripley revenue requirements over five years, with a carrying charge equal to 0.2917 percent. This five-year recovery period would allow MP to recover \$1,430,069 of the total approved 2016-2020 Camp Ripley revenue requirement through the 2021 Solar Renewable Factor rates.
2. Approve MP's adjusted Solar Renewable Factor rates, as show in the updated Exhibit B-1 of the Company's September 11, 2020 Reply Comments, using the five-year recovery period for Camp Ripley costs.
 3. Authorize an effective date of January 1, 2021 or the first billing cycle in the next full month that coincides with the final order date, with at least 30 days allowed for implementation, whichever is later.
 4. Require MP to file a Solar Renewable Factor true-up annually, following of the initial implementation of the authorized Solar Renewable Factor rates.
 5. Require the Company to submit, within 10 days of instant docket's order, a compliance filing of the Solar Renewable Factor tariff sheets, showing the Solar Factor rates approved by the Commission.
 6. Approve MP's proposed customer notification, as shown on page 5 of the Company's September 11, 2020 Reply Comments.

The Department provided analysis which showed that residential customers would see a 2.81% rate increase with 1-year recovery of Camp Ripley costs, 1.54% with a 3 year recovery, and 1.29% with a five year recovery period.⁴

IV. Staff Analysis

Staff notes that the issue of recovery of multiple years of costs causing rate shock also arose in the Transmission Cost Recovery Factor for MP (Docket No. M-19-440), where the Commission has now ordered MP to update its TCR filing annually, with details on projects to be included in future years. Staff also notes that timely recovery of costs in a time as close to the period the costs were incurred is generally accepted as a tenet of good ratemaking. Staff would request that utilities file rider updates at minimum annually where possible, unless Statute, Rule, or Commission Order says otherwise.

Staff notes that three and five year recovery windows for Camp Ripley would have similar levels of rate mitigation, with five years carrying only a small reduction in rates relative to three, while a three year recovery period would more quickly eliminate the balance to be collected and better match cost recovery and cost causation.

Staff also notes that Commission action on this docket has been significantly delayed and apologizes to parties and to ratepayers for any inconvenience or cost that this imposed.

⁴ Department Reply Comments of September 21, 2020, Table 15, Page 5.

V. Decision Alternatives

Approval of solar renewable factors within the Renewable Resource Rider

1. Approve Minnesota Power's petition for approval of its 2020 solar renewable factors within its Renewable Resource Rider. (MP)
2. Approve Minnesota Power's petition for approval of its 2020 solar renewable factors within its Renewable Resource Rider with modification. (Department)

Time Frame for Recovery

3. Approve Minnesota Power's cost recovery with revenue requirements of \$7,150,343 for Camp Ripley, \$16,984 for the Community Solar Garden, and \$3,038,222 for SolarSense, for a total recovery of \$9,437,440. (MP)
4. Approve a 1-year recovery of Camp Ripley Costs and set rates as shown in Column B of Table 3 above.
5. Approve a 5-year recovery of Camp Ripley Costs and a carrying charge equal to 0.2917%. This would allow MP to recover \$1,430,069 of the total approved 2016-2020 Camp Ripley revenue through the 2021 Solar Renewable factor rates and a total of \$4,331,654 for the first year of cost recovery, with rates as shown in Column D of Table 3, above. (Department)
6. Approve Minnesota Power's proposed Solar Factor with a 3-year recovery of Camp Ripley Costs and a 0.2917% carrying charge. This would allow recovery of \$5,182,618 in the first year with rates as shown in Column C of Table 3, above. (MP provided alternative)

Recovery of Costs from SES-Exempt Customers

7. Approve use of an energy charge to recover capacity benefits from SES-Exempt Customers (MP, Department), or
8. Require use of a demand charge to recover capacity benefits from SES-Exempt Customers.

Effective Date

9. Authorize an effective date of the first billing cycle in the next full month that coincides with the final order date, with at least 30 days allowed for implementation. (Department)

Filing Requirement

10. Require MP to submit, within 10 days of the order in this docket, a compliance filing of the Solar Renewable Factor tariff sheets, showing the Solar Factor rates approved by the Commission. (Department)
11. Require MP to file a Solar Renewable Factor true-up annually, following the initial implementation of the authorized Solar Renewable Factor rates. (Department)
12. Approve MP's proposed bill message for customer notification, as shown below:
(Department, MP)

The Solar Renewable Rider has been approved by the MPUC per Docket No. E-015/M-20-557 effective XX-XX-2021 and is reflected in your billing statement. The Solar Renewable Rider is X.XXX Cents per kilowatt-hour (kWh).

13. Take any other action as deemed appropriate by the Commission.