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June 30, 2020

VIA E-FILING

Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101-2147

**Re: In the Matter of Minnesota Power's
2020 Solar Renewable Factor within
Its Renewable Resources Rider
Docket No. E015/M-20-**

Dear Mr. Seuffert:

Minnesota Power (or the "Company") submits this Petition to the Minnesota Public Utilities Commission ("Commission") seeking approval of investments and expenses associated with qualifying solar energy projects pursuant to Minn. Stat. § 216B.1645, subd. 2a, Minn. Stat. § 216B.1691, subd. 2f(f). Additionally, the Company seeks approval to recover costs pursuant to the following Commission orders:

- Order Point 3 of the February 24, 2016 Order in Docket No. E015/M-15-773 authorizing Minnesota Power to "recover investments and expenditures in the Camp Ripley Project through its renewable rider based on the actual, reasonable, and prudently incurred project costs, not to exceed \$30 million;" and Order Point 6 (b) authorizing the Company to "add a solar renewable factor as part of the Company's renewable resources rider."
- Order Point 7 of the July 27, 2016 Order in Docket No. E015/M-15-825 authorizing the Company to "recover the costs for investment and activity related to the proposed 40 kW solar array under its Solar Renewable Factor ("Solar Factor") within the existing Renewable Resources Rider,..."
- Order Point 2 of the February 10, 2017 Order in Docket No. E015/M-15-825 authorizing the Company to "relocate SolarSense rebate cost recovery from CIP to the Solar Factor..."
- Order Point 83 of the March 12, 2018 Order in Docket No. E015/GR-16-664 approving "the methodology for the calculation and allocation of the Camp Ripley solar capacity benefits recommended by CEOs and the Department."

Specifically, the Company requests Commission approval for cost recovery related to Minnesota Power's: Camp Ripley Solar Project for the years 2016 – 2020; 40 kilowatt Community Solar Garden for the years 2016 - 2020, and SolarSense Customer Solar Program for the years 2017 - 2020. Upon Commission approval, Minnesota Power will add a line item adjustment to eligible customers' monthly electric bills under the 2020 Solar Renewable Factor within Minnesota Power's Commission-approved Renewable Resources Rider.

The Company understands the use of trade secret designations in filings to the Commission must be limited. Certain portions of the Petition contain trade secret information and are marked as such, pursuant to the Commission's Revised Procedures for Handling Trade Secret and Privileged Data which further the intent of Minn. Stat. § 13.37 and Minn. Rule 7829.0500. As required by the Commission's Revised Procedures, a statement providing justification for excising the Trade Secret Data is included in the Petition.

We look forward to the opportunity to work with the Commission, Department of Commerce – Division of Energy Resources and other stakeholders to review the information contained in the Company's first Solar Renewable Factor Filing. Please contact me at (218) 269-0712 or lhoyum@mnpower.com with any questions related to this Petition.

Yours truly,

A handwritten signature in cursive script, reading "Lori Hoyum", enclosed in a rectangular box.

Lori Hoyum
Regulatory Compliance Administrator

LMH:th
Attach.

**STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION**

In the Matter of Minnesota Power's
Renewable Resources Rider - 2020
Solar Factor Filing

Docket No. E015/M-20-XXX

SUMMARY

Minnesota Power (or the "Company") submits this Petition to the Minnesota Public Utilities Commission ("Commission") seeking approval of investments and expenses associated with qualifying solar energy projects pursuant to Minn. Stat. § 216B.1645, subd. 2a, Minn. Stat. § 216B.1691, subd. 2f(f). Additionally, the Company also seeks approval to recover costs pursuant to the following Commission orders:

- Order Points 3 and 6 of the February 24, 2016 Order in Docket No. E015/M-15-773 authorizing Minnesota Power to recover investments and expenditures in the Camp Ripley Project through its renewable to add a solar renewable factor as part of the Company's Renewable Resources Rider.
- Order Point 7 of the July 27, 2016 Order in Docket No. E015/M-15-825 authorizing cost recovery related to the Company's 40 kW solar array under its Solar Renewable Factor within the existing Renewable Resources Rider.
- Order Point 2 of the February 10, 2017 Order in Docket No. E015/M-15-825 authorizing the Company to "relocate SolarSense rebate cost recovery from CIP to the Solar Factor."
- Order Point 83 of the March 12, 2018 Order in Docket No. E015/GR-16-664 approving the "methodology for the calculation and allocation of the Camp Ripley solar capacity benefits recommended by CEOs and the Department."

Upon Commission approval, Minnesota Power will add a line item adjustment to eligible customers' monthly electric bills under the 2020 Solar Renewable Factor within Minnesota Power's Commission-approved Renewable Resources Rider.

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**STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION**

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Renewable Resources Rider - 2020
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Docket No. E015/M-20-XXX

I. INTRODUCTION

Minnesota Power (or the "Company") submits this Petition to the Minnesota Public Utilities Commission ("Commission") seeking approval of investments and expenses associated with qualifying solar energy projects pursuant to Minn. Stat. § 216B.1645, subd. 2a, Minn. Stat. § 216B.1691, subd. 2f(f). Additionally, the Company also seeks approval to recover costs pursuant to the following Commission orders:

- Order Point 3 of the February 24, 2016 Order in Docket No. E015/M-15-773 authorizing Minnesota Power to "recover investments and expenditures in the Camp Ripley Project through its renewable rider based on the actual, reasonable, and prudently incurred project costs, not to exceed \$30 million;" and Order Point 6 (b) authorizing the Company to "add a solar renewable factor as part of the Company's renewable resources rider."
- Order Point 7 of the July 27, 2016 Order in Docket No. E015/M-15-825 authorizing the Company to "recover the costs for investment and activity related to the proposed 40 kW solar array under its Solar Renewable Factor ("Solar Factor") within the existing Renewable Resources Rider,..."
- Order Point 2 of the February 10, 2017 Order in Docket No. E015/M-15-825 authorizing the Company to "relocate SolarSense rebate cost recovery from CIP to the Solar Factor..."
- Order Point 83 of the March 12, 2018 Order in Docket No. E015/GR-16-664 approving the "methodology for the calculation and allocation of the Camp Ripley solar capacity benefits recommended by CEOs and the Department."

Specifically, the Company requests Commission approval for cost recovery related to Minnesota Power's 10 megawatt ("MW") Camp Ripley Solar Project ("Camp Ripley Project" or "Project"), 40 kilowatt ("kW") Community Solar Garden ("CSG") Solar Array (or "40 kW solar array"), and SolarSense Customer Solar Program.¹ Upon Commission approval, Minnesota Power will add a line item adjustment to eligible customers' monthly electric bills under the 2020 Solar Renewable Factor ("2020 Solar Factor") within Minnesota Power's Commission-approved Renewable Resources Rider ("RRR").

On May 11, 2007, the Commission established Minnesota Power's Renewable Resources Rider through an order approving recovery of investments and expenditures for potential transmission upgrades for the Oliver Wind II power purchase agreement with FPL Energy allowed under Minn. Stat. § 216B.1645.² During the 2013 legislative session, Minn. Stat. § 216B.1691, the statute establishing Minnesota's Renewable Energy Standard ("RES"), was amended to include an additional Solar Energy Standard ("SES"). The SES requires 1.5 percent of a public utility's retail sales, net of customer exclusions, to be served by solar energy resources by 2020. Of the 1.5 percent SES, at least 10 percent must come from solar energy generated by or procured from solar photovoltaic ("PV") devices with a nameplate capacity of 20 kW or less ("Small Scale Carve-Out"). The SES statute was amended during the 2017 legislative session to increase the Small Scale Carve-Out of the SES from 20 kW or less to 40 kW or less for a public utility with between 50,000 and 200,000 retail electric customers. Additionally, a provision was added to allow individual customer subscriptions of 40 kW or less to a community solar garden to count towards the utility's Small Scale Carve-Out requirements.

Included in Minn. Stat. § 216B.1691, subd. 2f is a provision exempting retail electric sales to certain customers, namely large iron mining and paper production businesses, from the total retail electric sales calculation of a public utility. Per subdivision 2f(f), exempted customers are:

¹ There are no costs in the 2020 Solar Factor associated with Minnesota Power's June 17, 2020 announcement in Docket No. E,G999/CI-20-492 that the Company will seek Commission approval of new solar energy investment within its service territory with the development of approximately 20 MW of utility scale solar projects in northern Minnesota.

² Docket No. E015/M-07-216.

(1) an iron mining extraction and processing facility, including a scam mining facility as defined in Minnesota Rules, part 6130.0100, subpart 16; or

(2) a paper mill, wood products manufacturer, sawmill, or oriented strand board manufacturer.

Exempted customers cannot be charged for any costs specific to satisfying the SES.

A. Cost Allocation Methodology

On August 21, 2015, Minnesota Power filed a petition³ with the Commission seeking approval to include costs of the Camp Ripley Solar Project through a new Solar Factor separate from the existing Renewable Adjustment billing factor allowed under the Renewable Resources Rider. The Commission issued an Order on February 24, 2016, approving the Company's petition, subject to certain compliance requirements.⁴ In the February 24, 2016 Order, the Commission approved the Company's general approach to allocate costs to customers by creating a new Rider for Solar Energy Adjustment ("SEA Rider"), in conjunction with the Company's existing Rider for Fuel and Purchased Energy Adjustment ("FPE Rider"), and a new Solar Factor as part of the Company's RRR which is the subject of this Petition.

Minnesota Power currently recovers fuel and purchased power costs through its FPE Rider, which is applicable to the firm energy of all its retail customers, including solar-exempt customers. To ensure that the costs of SES compliance are allocated only to solar-paying customers,⁵ costs to meet the SES are removed from the FPE Rider and recovered instead through the SEA Rider, which applies only to solar-paying customers. The Company began applying the SEA Rider to customer bills in February 2017. Solar compliance costs which do not flow through the SEA Rider such as costs associated with owning and operating a solar facility are allocated to only solar-paying customers in the proposed 2020 Solar Factor.

³ Docket No. E015/M-15-773.

⁴ These compliance items were approved by the Commission in an order dated December 12, 2016.

⁵ Solar paying customers include all customer except those exempted under Minn. Stat. § 216B.1691, namely iron mining and paper production businesses.

The methodology for allocating the solar capacity benefits of the Camp Ripley Project between SES-exempt and non-exempt solar-paying customers was approved by the Commission in its March 12, 2018 Order in the Company's 2016 retail rate case.⁶ The premise of the allocation methodology is that SES-Exempt customers share in these benefits, although they do not help pay for solar power; therefore, the solar capacity benefit charge is applied to exempt customers. The Company applied this allocation methodology based on each class's annual Midcontinent Independent System Operator ("MISO") Coincident Peak ("CP"). First the solar capacity benefits allocated to the SES-Exempt customers are calculated. Then these accrued benefits are removed from the SES-exempt customers as a charge via the Solar Factor and credited to the SES-Paying customers based on each class's annual MISO CP demand. This capacity benefit credit is netted against SES-Paying customers' revenue requirements and added as a charge to SES-Exempt customers.

B. 2020 Solar Factor

Minnesota Power is requesting recovery of costs associated with its Camp Ripley Solar Project, 40 kW Community Solar Garden Solar Array, and SolarSense Customer Solar Program through its 2020 Solar Factor.

1. Camp Ripley Solar Project

On August 21, 2015, Minnesota Power submitted a petition seeking approval for investments and expenditures related to the Camp Ripley Project, pursuant to Minn. Stat. § 216B.1645, subd. 1 and Minn. Rules 7829.1300, through a new Solar Factor separate from the existing Renewable Adjustment Factor. The Camp Ripley Project is a 10 MW solar facility located on Camp Ripley, a Minnesota Army National Guard base and key training facility near Little Falls, Minnesota. The Company worked with a solar contractor to construct the facility and partnered with CoBank to execute an innovative lease agreement to fund a majority of the investment. The 10 MW solar array is producing nearly one third of the energy required for the Company to meet the SES.⁷

⁶ See Order Point 83 (see pages 100 and 116) in Docket No. E015/GR-16-664.

⁷ Docket No. E015/M-15-773.

On February 24, 2016, the Commission issued an order approving the Company's petition, subject to certain compliance requirements which were subsequently approved by the Commission in an order dated December 12, 2016.

2. 40 kW Community Solar Garden Solar Array

On September 10, 2015, Minnesota Power submitted a petition seeking approval of its proposed Community Solar Garden Pilot Program ("CSG Pilot Program"), and current cost recovery for investment and activity related to compliance with the Small Scale Carve-Out of the SES, pursuant to Minn. Stat. § 216B.05. The CSG Pilot Program is comprised of a 1 MW power purchase agreement and a smaller, more locally visible 40 kW solar array that is owned and operated by Minnesota Power. Together the 1 MW and the 40 kW solar systems generate about one third of the solar energy required for the Company to comply with the Small Scale Carve-Out of the SES.

The SEA Rider ensures that fuel and purchased power costs associated with SES compliance, such as the 1 MW CSG Pilot Program power purchase, are allocated only to solar-paying customers. The Solar Factor functions similarly to ensure that the costs of SES compliance associated with owning and operating a solar facility such as the 40 kW solar array, are allocated only to solar-paying customers.

On July 27, 2016,⁸ the Commission issued an order approving the Company's CSG Pilot Program with modifications, and the ability to recover the costs for investment and activity related to the 40 kW solar array under its Solar Factor within the existing RRR.⁹

3. SolarSense Program Costs

On June 1, 2016, Minnesota Power submitted a petition seeking approval to expand its SolarSense Customer Solar Program in response to increased customer demand and as a means of compliance with the Small Scale Carve-Out of the SES.¹⁰ The proposal outlined a three-year budget, which more than tripled the rebates available for customer-sited solar installations, created a first-of-its-kind in Minnesota Low Income Solar Pilot

⁸ Docket No. E015/M-15-825.

⁹ See Order Point 7.

¹⁰ Docket No. E015/M-16-485.

Program and established a small budget for solar R&D (Research and Development) projects.¹¹ Minnesota Power also requested approval to relocate costs associated with customer solar programs from the Conservation Improvement Program (“CIP”) into the approved Solar Factor within the Rider for Renewable Resources.

The proposal and request to relocate SolarSense rebate cost recovery from CIP to the Solar Factor was unanimously approved by the Commission in its February 10, 2017 Order.

4. 2020 Solar Factor Proposed Effective Date

Minnesota Power proposes January 1, 2021, as the effective date for the 2020 Solar Factor. With the COVID-19 virus impacting the health and financial well-being of people around the state and in the communities Minnesota Power serves, a January 1, 2021 effective date is reasonable and in the best interest of customers during this unprecedented time. Additionally, the proposed January 1, 2021 effective date will be after final testing and implementing significant upgrades to the Company’s billing system.

¹¹ The Commission approved Minnesota Power’s request to extend the SolarSense Customer Solar program through 2020 in its December 20, 2019 Order in Docket No. E015/M-16-485.

II. PROCEDURAL MATTERS

Pursuant to Minn. Stat. § 216B.16, subd. 1 and Minn. Rule 7829.1300, Minnesota Power provides the following required general filing information.

A. Summary of Filing (Minn. Rule 7829.1300, subp.1)

A one-paragraph summary accompanies this Petition.

B. Service on Other Parties (Minn. Rule 7829.1300, subp. 2)

Pursuant to Minn. Stat. § 216.17, subd. 3 and Minn. Rules 7829.1300, subp. 2, Minnesota Power eFiles the Petition on the Minnesota Department of Commerce, Division of Energy Resources (“Department”) and the Minnesota Office of the Attorney General – Antitrust and Utilities Division. A summary of the filing prepared in accordance with Minn. Rules 7829.1300, subp. 1 is being served on Minnesota Power’s general service list.

C. Name, Address and Telephone Number of Utility (Minn. Rule 7829.1300, subp. 3(A))

Minnesota Power
30 West Superior Street
Duluth, MN 55802
(218) 722–2641

D. Name, Address and Telephone Number of Utility Attorney (Minn. Rule 7829.1300, subp. 3(B))

David Moeller
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E. Date of Filing and Date Proposed Rate Takes Effect (Minn. Rule 7829.1300, subp. 3(C))

This Petition is being filed on June 30, 2020. Minnesota Power proposes that the 2020 Solar Factor take effect January 1, 2021, which complies with the requirement that the new rate will not take effect sooner than 90 days from the Petition filing date.

F. Statute Controlling Schedule for Processing the Filing (Minn. Rule 7829.1300, subp. 3(D))

This Petition is made pursuant to Minn. Stat. § 216B.1645, subd. 2a. Minn. Rule 7825.3200 requires that utilities serve notice to the Commission at least 90 days prior to the proposed effective date of modified rates. Furthermore, Minnesota Power's proposed 2020 Solar Factor falls within the definition of a "Miscellaneous Tariff Filing" under Minn. Rules 7829.0100, subp. 11 and 7829.1400, subp. 1 and 4 permitting comments in response to a miscellaneous filing to be filed within 30 days, and reply comments to be filed no later than 10 days thereafter.

G. Utility Employee Responsible for Filing (Minn. Rule 7829.1300, subp. 3(E))

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H. Impact on Rates and Services (Minn. Rule 7829.1300, subp. 3(F))

The 2020 Solar Factor will have no effect on Minnesota Power's base rates. The additional information required under Minn. Rule 7829.1300, subp. 3(F) is included throughout this Petition.

I. Service List (Minn. Rule 7829.0700)

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III. RENEWABLE RESOURCES RIDER AUTHORIZATION

Minn. Stat. § 216B.1645, subd. 2a allows the Commission to approve a 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 those facilities were previously approved by the Commission. Under Minn. Stat. § 216B.1645, subd. 2a, the Commission may approve, or approve as modified, a rate schedule that:

- (1) allows a utility to recover directly from customers on a timely basis the costs of qualifying renewable energy projects, including:
 - (i) return on investment;
 - (ii) depreciation;
 - (iii) ongoing operation and maintenance costs;
 - (iv) taxes; and
 - (v) costs of transmission and other ancillary expenses directly allocable to transmitting electricity generated from a project meeting the specifications of this paragraph;
- (2) provides a current return on construction work in progress, provided that recovery of these costs from Minnesota ratepayers is not sought through any other mechanism;
- (3) allows recovery of other expenses incurred that are directly related to a renewable energy project, including expenses for energy storage, provided that the utility demonstrates to the commission's satisfaction that the expenses improve project economics, ensure project implementation, advance research and understanding of how storage devices may improve renewable energy projects, or facilitate coordination with the development of transmission necessary to transport energy produced by the project to market;

- (4) allocates recoverable costs appropriately between wholesale and retail customers;
and
- (5) terminates recovery when costs have been fully recovered or have otherwise been reflected in a utility's rates.

IV. 2020 SOLAR FACTOR

A. Description of Facilities (Minn. Stat. §216B.1645, subd. 2a(b)(1))

1. Camp Ripley Solar Project

The Camp Ripley Project, Minnesota Power's first utility scale solar energy facility, is a 10 MW solar energy facility located on Camp Ripley, a MN National Guard Base near Little Falls, Minnesota. When it began commercial operations in November 2016, the 10 MW solar array was the largest solar energy installation on military property in the state, and the largest solar array at any National Guard base in the country. Approximately one-third of the solar energy Minnesota Power expects to need to meet the SES is produced by the Project.

The location of the Camp Ripley Project site combines the strong solar resource of being towards the southern end of the Company's service territory with an adequate land resource and proximity to Minnesota Power's distribution system to provide cost-effective solar energy generation to meet customer power needs. The Project covers 80 acres of underutilized government property at Camp Ripley with photovoltaic panels on racks and native pollinator-friendly plant species. The Camp Ripley solar facility also includes a solar education center, consisting of an outdoor platform with informational stations and a viewing area overlooking the solar installation.



Figure 1- Aerial view of the Camp Ripley Solar Facility

The Camp Ripley Project interconnects to Minnesota Power's distribution system through a 34.5 kV distribution line on the east side of the solar project, allowing the solar energy to flow to Minnesota Power customers. The interconnection provides the ability to island a portion of the line and feed energy back to Camp Ripley through automated switching and controls.

Upgrades to the Company's distribution system were required to accommodate interconnection of the Camp Ripley Project. The required projects were:

1. Installation of a 2500kVA stepdown transformer to serve as an alternate source to the Camp Ripley Project. New overhead and underground distribution lines were constructed to tie into existing infrastructure. Switches were installed at the Project site and at the new transformer site.
2. Due to age of existing panel protection equipment at the Sylvan HE Station, panel upgrades were required to accommodate the new Camp Ripley Project addition. The Company also updated the station protection which included the one transformer and 34kv bus differential panel along with updating the other 504 feeder at the station. New metering was installed on the feeder panels for each feeder. The station protection upgrades allow for the zones of protection at the substation to be coordinated with the solar farm addition.
3. Due to age of existing panel protection equipment at the Blanchard HE Station, panel upgrades were required to accommodate the new Camp Ripley Project addition. The Company also upgraded the protection to the 521 feeder panel located within the station. Metering was also updated on each feeder panel.
4. Approximately 5 miles of fiber optic cable along with the associated communications equipment were installed. This equipment allows Minnesota Power to control and communicate securely with the Camp Ripley facility.



Figure 2 - Components of the Fiber Distribution Project

As shown in Table 1, Camp Ripley's actual generation has been generally consistent with the estimates provided in the Company's August 21, 2015 initial petition seeking cost

recovery for the Camp Ripley Project (Docket No. E015/M-15-773), with the exception of 2019. The lower production in 2019 was largely due to a ground fault problem affecting one inverter and lower solar irradiance.

Table 1- Camp Ripley Generation

Year	Estimated Generation (MWh)	Actual Generation (MWh)
2017	16,826	17,066
2018	16,708	16,679
2019	16,591	14,011

2. 40 kW Community Solar Garden Solar Array

The Company’s CSG Pilot Program consists of a 1 MW power purchase agreement from a solar array constructed near Wrenshall, Minnesota and a Minnesota Power owned smaller highly visible 40 kW solar array on one of the most heavily trafficked thoroughfares in Duluth, Minnesota adjacent to Minnesota Power’s Herbert Service Center.



Figure 3- 1 MW CSG Solar Array in Wrenshall, Minnesota



Figure 4- 40 kW CSG Solar Array in Duluth, Minnesota

Combined, the two arrays represent a total of 1,040 one kW blocks that customers can subscribe to. The program offers three convenient ways for customers to participate: a onetime upfront payment, a fixed monthly subscription fee or a per-kilowatt hour charge. Participating customers began receiving bill credits for the solar energy associated with their subscriptions in early 2018. Minnesota Power is using the CSG Pilot Program to learn more about customer preferences regarding size and location of community solar arrays for future program design. Based on customer feedback and nearly continuous 100 percent subscription, the current CSG program design is well regarded by customers.

The solar energy generated by the 40 kW solar array qualifies as eligible energy technology under Minn. Stat. § 216B.1691, subd. 1. This 40 kW solar array, along with the 1 MW Solar Power Purchase Agreement (“PPA”), will secure approximately one third

of the solar energy Minnesota Power expects to need to meet the Small Scale Carve-Out.

As shown in Table 2, actual generation for the 40 kW CSG Solar Array has consistently exceeded the estimated generation of the project.

Table 2 - 40 kW CSG Solar Array Generation

Year	Estimated Generation (MWh)	Actual Generation (MWh)
2017	52	63
2018	51	66
2019	51	58

The 1.5 acre 40 kW solar array site also includes a pollinator habitat restoration project (“restoration project”). The restoration project follows the Minnesota Department of Natural Resources best management practices and habitat restoration guidelines¹² for native insect pollinators (bees, butterflies, moths, flies, etc.). The restoration project is in its third year of establishment and should now be able to thrive with minimal support.

¹² Minn. Statutes, Chapter 84.973.



Figure 5- 40 kW CSG Solar Array Pollinator Habitat

There are no costs associated with the restoration project included in the Company's request for cost recovery. The 40 kW array and restoration project are highly visible to anyone traveling through the adjacent intersection in any direction. The 40 kW solar array serves as an educational tool for area students and company employees, and was featured in the solar home tour in 2018.¹³

¹³ To date, Minnesota Power has hosted tours for Duluth middle school classes and, in 2017, assisted in organizing the Duluth Solar Home tours as part of a national tour day with the American Solar Energy Society.

B. Project Schedule (Minn. Stat. §216B.1645, subd. 2a(b)(2))

1. Camp Ripley Solar Project

Construction of the Camp Ripley Project began March 2016. The Project was completed in November 2016.

2. 40 kW Community Solar Garden Solar Array

Construction of the CSG 40 kW solar array began October 2016. The 40 kW CSG solar array was completed in December 2016.

C. SolarSense Cost Recovery Eligibility

Minnesota Power began offering the SolarSense rebate program in 2004, long before the SES became law.¹⁴ It was developed to encourage the adoption of customer-sited solar installations by reducing the large upfront cost of installing solar through a capacity-based incentive, making individual solar a more viable option for residential and commercial customers. Since its initial implementation in 2004, the program has continuously evolved to meet the needs of customers and send proper signals to encourage a sustainable solar market in northern Minnesota.

Prior to the Commission's February 10, 2017 Order, the Company funded the program through its CIP, which allocates a percentage of the utility's gross operating revenues to energy conservation improvements. A portion of the total percentage spent on energy conservation may be used to support the installation of electric generating facilities that use renewable energy sources. The Commission's February 10, 2017 Order authorizes Minnesota Power to request cost recovery for its solar research and development costs; program and delivery costs; and low-income pilot program costs.¹⁵ Commission approval to relocate costs associated with customer solar programs from CIP and into the Commission-approved Solar Factor within the RRR allowed Minnesota Power to continue

¹⁴ Minnesota Power is seeking recovery through the 2020 Solar Factor of SolarSense Program costs beginning in 2017, four years after the SES was enacted.

¹⁵ The Commission's February 10, 2017 Order denied cost recovery of Minnesota Power's solar education and outreach activities cost without prejudice; therefore, none of these costs are included in the 2020 Solar Factor.

to offer solar programs to meet customer demand, triple its incentives, establish a new low-income offering, meet the Company's requirements under the SES, and remain compliant regarding various statutory customer exemptions.

Through the expanded SolarSense program, Minnesota Power has been able to increase the amount of customer-sited solar installations in northern Minnesota significantly, as described in the Company's annual SES Progress Reports.¹⁶ Additionally, three solar arrays have been or will be funded through the Low Income Solar Pilot Program, allowing Minnesota Power to identify opportunities to serve low income customers through innovative solar projects. Minnesota Power's SolarSense program helps reduce the upfront cost of installing a solar system, allowing more customers to pursue customer-sited solar installations.

D. Minnesota Power's Costs (Minn. Stat. §216B.1645, subd. 2a(b)(3 & 4))

Minnesota Power has employed multiple steps to help ensure the lowest costs to customers on the Camp Ripley Project and CSG 40 kW solar array. Minn. Stat. § 216B.1645, subd. 2a(b)(4). Minnesota Power utilized its standard purchasing procedures to obtain competitive quotations for most major purchases and awarded contracts to the lowest bidder(s), unless a better overall value could be obtained. In some cases, contracts were awarded on a single source basis to qualified contractors based on utilizing existing partnering agreements or based upon original equipment manufacturer considerations. Minnesota Power will provide any additional information deemed necessary, as part of notice and comment, for the Commission to conclude that "the utility's efforts to ensure that costs of the facilities are reasonable and were prudently incurred." Minn. Stat. § 216B.1645, subd. 2a(b)(4).

1. Camp Ripley Solar Project

Minnesota Power is seeking recovery of actual Camp Ripley Project costs for the years 2016 through 2019, and projected costs for 2020. The estimated cost of the Camp Ripley Solar Project was approximately \$30 million. Minnesota Power operates the Project

¹⁶ Docket No. E-999/M-19-276 and Docket No. E-999/M-18-205.

through a lease agreement with CoBank that includes an option for the Company to purchase the assets when the lease expires. The Company initially estimated it would incur capital costs of about \$2.3 million in distribution system upgrades, and an additional \$4.6 million for purchase of the assets associated with the lease buy-out for a total of \$6.9 million. Minnesota Power is happy to report that the total cost to construct the Camp Ripley Solar Project was approximately \$22.7 million, including about \$1.3 million for the distribution system upgrades. Upon payment of the above-referenced \$4.6 million, the Company will have incurred a total of \$5.9 million in capital costs, for an overall total project cost of \$28.6 million. Minnesota Power is seeking recovery of actual costs associated with the Camp Ripley Solar Project for the years 2016 through 2019, and projected costs for 2020.

a. Prudence of Construction and Interconnection Costs

The Company worked with a solar contractor to construct the facility. As discussed in Section III.C (page 10) of the Company's August 21, 2015 initial petition in Docket No. E015/M-15-773, Minnesota Power retained an independent consultant in late 2014 to oversee a request for proposal ("RFP") process for the Camp Ripley Project and to ultimately provide an independent evaluation of bids. On December 1, 2014, Minnesota Power posted a prequalification questionnaire on its website, with the intent of identifying a limited number of qualified contractors to invite to participate in a site-specific RFP process for the Camp Ripley Project. Pre-qualification items requested information from prospective bidders on financial, bonding, legal, and insurance matters, as well as local and national experience. Minnesota Power issued a press release on the posting of this questionnaire, which was open to all developers. The press release was circulated through numerous media forums, including Renewable Energy News, Energy Business Network, Global Energy News, and Electrical Construction & Maintenance (EC&M) website. Completed pre-qualification questionnaires were accepted until December 15, 2014. This innovative prequalification process ensured an opportunity for all qualified solar developers to bid to participate in the Project.

The Company was interested to participate in the bidding process in order to gain critical knowledge and skills in solar development and to ultimately explore cutting edge technology developments such as smart grids, batteries, and distributed generation, which are part of future phases of the Memorandum with Camp Ripley.¹⁷ Therefore, bidders were instructed to provide an Engineer, Procure, Construct (“EPC”) option, along with a Purchased Power Agreement (“PPA”) option, in their bids. This allowed both options to be thoroughly evaluated in order to obtain the best value for customers.

Although thirteen bidders were pre-qualified in the initial process, bids were ultimately received for six EPC proposals and three PPA proposals. The PPA proposals were forwarded directly to the independent consultant, who separated the pricing and commercial terms from the technical terms. Pricing and commercial terms of the PPA proposals were not shared with the Minnesota Power employees who evaluated the EPC proposals. Minnesota Power evaluated the technical aspects of the PPA proposals to ensure that technical requirements of these proposals were met. Minnesota Power also evaluated the EPC proposals and selected one developer (“EPC Partner”) to work with to provide a Minnesota Power EPC bid into the selection process. Minnesota Power’s EPC bid was provided to the independent consultant, along with the three verified PPA proposals, to determine the lowest cost option for customers.

Minnesota Power’s EPC bid was deemed by the independent consultant as the lowest cost option to develop the Camp Ripley Project.⁸ On June 18, 2015, Minnesota Power entered into a solar array construction agreement with the EPC Partner, for the supply and erection of the 10 MW solar array. The EPC Partner, together with its affiliates, had at that time installed roughly 450 MW of solar systems in North America and brought strong qualifications and experience to the Camp Ripley Project.

Minnesota Power was responsible for project management and execution of the four projects required to interconnect the Project to Minnesota Power’s distribution system that

¹⁷ A memorandum of understanding (“Memorandum”) was signed on August 27, 2014, by Minnesota Power and the MN National Guard. The Memorandum outlines plans to help both parties meet their energy objectives including development of the Camp Ripley Project, as well as provisions for Minnesota Power to help Camp Ripley reduce its energy usage by 30 percent and to install backup generation at Camp Ripley.

are discussed in more detail in Section V.A.1 on pages 10 and 11. The Company mostly utilized standard equipment used across Minnesota Power's distribution system which allows the company to leverage economies of scale, and eliminates having to stock extra parts for unique equipment. The Company is pleased to report it was able to complete the four projects for a total cost of about \$1.3 million, well under the estimated \$2.3 million.

Minnesota Power employed multiple steps to help ensure the lowest overall cost for the Camp Ripley Project. As described previously, Minnesota Power engaged in a unique RFP process for the majority of the Project to ensure the lowest costs for customers. The construction agreement with the EPC Partner was a lump sum contract that limited risk of project overruns. The Company utilized fixed price contracts to manage costs and at the conclusion of the project had only one minor change order. Additionally, the unique financial arrangement with CoBank, its financial partner, maximized the benefits of accelerated depreciation and ITC benefits for the Project. As a result of these measures, the Project's total overall cost of \$28.6 million was slightly under the initial projected cost of approximately \$30 million.

b. Camp Ripley Solar Equipment Lease

Minnesota Power entered into a lease arrangement with CoBank who financed construction of the majority of the solar generating facility and is leasing the equipment to the Company for a ten-year period. The Company will have the option to purchase the solar equipment at the end of the ten-year period, or alternatively, can renew the lease for 24 months. CoBank's ability to take full advantage of the Investment Tax Credits ("ITC"), and accelerated depreciation of the Project, benefits customers through lower lease payments. Per the terms of Schedule A of the Lease Agreement with CoBank that was executed on December 23, 2016, Minnesota Power will pay approximately [TRADE SECRET DATA BEGINS [REDACTED] TRADE SECRET DATA ENDS] to lease the equipment. The lease finances all but a small portion of the Project. Minnesota Power financed and owns the four distribution sub-projects related to integrating the Project onto the Company's distribution system. These distribution sub-projects are integral parts of

the Company's distribution system, including communication infrastructure, distribution upgrades, and relay upgrades; all function to allow the energy to flow safely and reliably on the distribution system. The Company did not include these subprojects in the lease in order to retain ownership of these assets, partly because of the inability to separate the assets from the rest of Minnesota Power's distribution system. Additionally, if the Company did not have ownership of these assets, it would impede the ability to deliver energy to customers. The cost of these sub-projects was about \$1.3 million of the approximately \$28.6 million Project.

c. Camp Ripley Recoverable Land Lease Payments

On April 25, 2016 Minnesota Power filed a compliance filing¹⁸ detailing the real estate appraisal results for the Camp Ripley land lease payments. In the Commission's December 12, 2016 Order in Docket No. E015/M-15-773 ("Order"), Minnesota Power was directed to remove the amount attributable to security benefits and the Solar Education Center from the total lease costs, as agreed to by the Company. This resulted in a total recoverable net present value of \$197,619 for the land lease payments. The details of these payments are replicated in Table 3, and are included in the Camp Ripley revenue requirements in Exhibit C-4, Section C, line 3.

In Table 3, the data in the green highlighted cells shows the costs included in the calculation of the net present value ("NPV") of the allowed payment. The data in the yellow highlighted cells shows only those costs that are included in the recoverable annual payment shown in blue highlight. Table 3 clearly shows that no costs attributable to security benefits and the Solar Education Center have been included in the recoverable annual payment.

¹⁸ Docket No. E015/M-15-773.

Table 3- Camp Ripley Recoverable Land Lease Payments

Camp Ripley Recoverable Land Lease Payments							
Inflation	2.50%						
Discount Rate	8.18%						
NPV of Allowed Payment	\$197,619						
	Base Land Cost	Benefit of Security	Benefit of Security During Construction	Benefit of No County Permitting	Solar Education Center	Property Tax	Recoverable Annual Payment
NPV of Allowed Payment	\$128,000	\$142,824	\$37,800	\$24,800	\$25,000	\$44,819	
Year							
2016	\$128,000	\$9,560	\$37,800	\$24,800	\$25,000	\$3,000	\$155,800
2017	\$131,200	\$9,799				\$3,075	\$3,075
2018	\$134,480	\$10,044				\$3,152	\$3,152
2019	\$137,842	\$10,044				\$3,231	\$3,231
2020	\$141,288	\$10,552				\$3,311	\$3,311
2021	\$144,820	\$10,816				\$3,394	\$3,394
2022	\$148,441	\$11,087				\$3,479	\$3,479
2023	\$152,152	\$11,364				\$3,566	\$3,566
2024	\$155,956	\$11,648				\$3,655	\$3,655
2025	\$159,854	\$11,939				\$3,747	\$3,747
2026	\$163,851	\$12,238				\$3,840	\$3,840
2027	\$167,947	\$12,544				\$3,936	\$3,936
2028	\$172,146	\$12,857				\$4,035	\$4,035
2029	\$176,449	\$13,179				\$4,136	\$4,136
2030	\$180,861	\$13,508				\$4,239	\$4,239
2031	\$185,382	\$13,846				\$4,345	\$4,345
2032	\$190,017	\$14,192				\$4,454	\$4,454
2033	\$194,767	\$14,547				\$4,565	\$4,565
2034	\$199,636	\$14,910				\$4,679	\$4,679
2035	\$204,627	\$15,283				\$4,796	\$4,796
2036	\$209,743	\$15,665				\$4,916	\$4,916
2037	\$214,986	\$16,057				\$5,039	\$5,039
2038	\$220,361	\$16,568				\$5,165	\$5,165
2039	\$225,870	\$5,294				\$5,294	\$5,294
2040	\$231,517	\$17,291				\$5,426	\$5,426

2041	\$237,305	\$17,724				\$5,562	\$5,562
2042	\$243,237	\$18,167				\$5,701	\$5,701
2043	\$249,318	\$18,621				\$5,843	\$5,843
2044	\$255,551	\$19,086				\$5,989	\$5,989
2045	\$261,940	\$19,564				\$6,139	\$6,139
2046	\$268,489	\$20,053				\$6,293	\$6,393
2047	\$275,201	\$20,554				\$6,450	\$6,450
2048	\$282,081	\$21,068				\$6,611	\$6,611
2049	\$289,133	\$21,595				\$6,777	\$6,777
2050	\$296,361	\$22,134				\$2,946	\$6,946

d. Camp Ripley Solar Capacity Benefits

In the December 12, 2016 Order, the Commission accepted Minnesota Power’s commitment to develop and provide a methodology in its 2016 rate case for allocating the Camp Ripley solar capacity benefits between SES-Exempt and SES-Paying customers. In Order point 83 in the March 12, 2018 Findings of Fact, Conclusions and Order in the Company’s 2016 rate case,¹⁹ the Commission approved the methodology for the calculation and allocation of the Camp Ripley solar capacity benefits as recommended by the Clean Energy Organizations (“CEOs”) and the Department.

The CEOs’ methodology of calculating the solar capacity benefits is detailed in the Direct Testimony of Allen Gleckner²⁰ and is based on the net annual avoided capacity costs as filed annually in Minnesota Power’s Cogeneration and Small Power Production Tariff Filing. The example detailed starting on page 7, line 16 of Direct Testimony of Allen Gleckner is followed in this filing for 2017 to 2020 as shown in Exhibit E-1.

In Collins Surrebuttal, page 46,²¹ the Department agreed with the CEOs methodology for calculating the capacity benefits and reiterated its recommendation that the benefits be allocated using demand during the Midcontinent Independent System Operator (“MISO”) annual peak. In Collins Direct Testimony, on pages 34 – 35,²² the Department explains

¹⁹ Docket E-015/GR-16-664.

²⁰ Direct Testimony of Clean Energy Organizations’ witness Allen Gleckner dated May 31, 2017.

²¹ Surrebuttal Testimony of Department witness Stephen Collins dated July 21, 2017.

²² Direct Testimony of Stephen Collins dated June 1, 2017.

this allocation as taking the capacity benefits away from the SES-Exempt customers and giving them to the SES-Paying customers based on the customer demand during the MISO peak.

As shown in Exhibit E-2, the Company followed this allocation methodology based on each class's annual MISO CP demand. The solar capacity benefits calculated in Exhibit E-1 are allocated to the SES-Exempt customers in line 9. These accrued benefits are taken away from these customers as a charge via the Solar Factor and credited to the SES-Paying customers based on each class's annual MISO CP demand as shown on line 10. This capacity benefit credit is netted against SES-Paying customers' revenue requirements as shown in Exhibit C-1 and added as a charge to SES-Exempt customers.

2. 40 kW Community Solar Garden Solar Array

Minnesota Power is seeking recovery of actual costs for the 40 kW CSG Solar Array for the years 2016 through 2019, and projected costs for 2020. Minnesota Power used a competitive RFP process in constructing the 40 kW CSG Solar Array. Twelve solar installers identified through the Oracle Sourcing system were sent the RFP: the Company received three proposals. The RFP requested an American made choice of solar module. All three proposals gave an American made choice, and two also gave a foreign made choice. Each proposal had a number of unique attributes that were weighed in the process of selecting the project's solar installer, including the price differentiation, qualitative analysis of the entity submitting the proposal, the choice of racking configuration, and the estimated power production. Company representatives reached out to entities for answers to any remaining questions prior to making a solar installer selection. At the conclusion of the RFP process, Minnesota Power entered into a fixed-price turn-key delivery contract with Hunt Electric Corporation to install a 40 kW solar PV system using American made First Solar PV modules.

In the Company's September 10, 2015 initial petition, the estimated cost of the 40 kW CSG Solar Array project was between \$225,000 and \$250,000. Minnesota Power is pleased to report that the final cost of the 40 kW CSG Solar Array is well below the estimate at \$203,000 and only required one change order.

3. SolarSense Program Costs

Minnesota Power is seeking recovery of actual Solar Sense Program Costs for the years 2017 through 2019, and projected costs for 2020. The February 10, 2017 Order authorizes Minnesota Power to relocate costs associated with customer solar programs from CIP and into the Commission-approved Solar Factor within the RRR. These costs include: solar research and development costs; program and delivery costs; and low-income pilot program costs. The February 10, 2017 Order denied cost recovery of the Company's solar education and outreach activities cost without prejudice; therefore, none of these costs are included in the 2020 Solar Factor.

As shown in Table 4, known program authorized expenses for these years total approximately \$2.1 million. The Company is seeking an additional approximately \$911,000 for program related costs projected for 2020. The revenue requirements for the year 2017 through 2020 total just under \$3 million as shown on Exhibit B-2 (page 1 of 1).

Table 4 - SolarSense Actual Program Costs 2017- 2019

Program Name	2017	2018	2019	TOTAL
Low-Income Solar Pilot Program	\$36,400.00			\$36,400.00
Research and Development	\$11,304.40	\$15,000.00		\$26,304.40
Customer Incentives	\$275,492.00	\$481,464.00	\$1,031,588.00	\$1,788,544.00
Program Development and Delivery	\$66,396.38	\$79,280.52	\$76,302.25	\$221,979.15
Grand Total	\$389,592.78	\$575,744.52	\$1,107,890.25	\$2,073,227.55

E. Revenue Requirements

The total revenue requirements and proposed 2020 billing factors are shown in Exhibit B-1. The total revenue requirement of \$10.2 million consists of \$9.4 million allocated to SES-Paying customers and \$0.8 million allocated to SES-Exempt customers. Exhibit B-2 shows the total revenue requirements for the three components of the 2020 Solar Factor: \$7.2 million for Camp Ripley, \$16,984 for the Community Solar Garden and \$3.0 million for SolarSense.

Exhibit C-1 shows the total Camp Ripley revenue requirement of \$7.2 million, initially allocated to the SES-Paying customers. As described above in Section D, the SES-Exempt customers are allocated a charge for accrued solar capacity benefits of \$0.8 million. This same amount is then credited to SES-Paying customers as an offset to their total revenue requirements.

Exhibit C-2 summarizes the annual revenue requirements of all Camp Ripley Project components using actual costs from 2016 to 2019 and budgeted costs for 2020. These components are grouped into costs of the Solar Lease, the four distribution projects owned by Minnesota Power, and the Solar Asset that the Company has an option to purchase in 2027. The monthly revenue requirements of these components are shown in Exhibit C-3.

Exhibit C-4 shows the cost of items included in the Solar Lease component. These include Minnesota Solar Energy Production Tax, Operation and Maintenance Expenses, and Project Costs, which include the various expenses of the solar lease. Exhibit C-5 shows support for Operation and Maintenance expenses.

Exhibits C-6 to C-9 show the detailed revenue requirement calculations of the four distribution projects owned by Minnesota Power. The Current Return on Construction Work in Progress (“CWIP”) begins February 2016 following the Commission approval of the Camp Ripley project. The return on average rate base, depreciation expense, and property tax components of revenue requirements begin when the project goes into service. As discussed further below, the Company anticipates the investment tax credit to begin around 2028. Exhibit C-10 is an input summary of the annual property tax by project.

Exhibit C-11 shows the four distribution projects’ Plant Additions, Allowance for Funds used During Construction (“AFUDC”), and Return on CWIP calculations. For each project this exhibit shows the total capital expenditure, the amount of AFUDC included, the amount of internal costs excluded, the AFUDC on internal costs excluded, and the return on CWIP included in revenue requirements.

Exhibits D-1 to D-3 show the various assumptions and inputs used in calculating the revenue requirements, including book and tax depreciation rates, rates of return, and tax rates.

Exhibit D-4 shows the energy allocation factors used in allocating the revenue requirements to class as well as the billing units used in rate design.

Exhibit E-1 shows the calculation of the Solar Capacity Benefit following the methodology described above in Section D. Exhibit E-2 shows the allocation of the Solar Capacity Benefit to the SES-Exempt customers and SES-Paying customers following the methodology described above in Section D.

Exhibit F-1 shows the annual summary of the Community Solar Garden revenue requirements and the method of cost recovery for actual costs from 2016 to 2019 and budgeted costs for 2020. The total revenue requirements are broken into either Subscribed Costs that are recovered through subscriptions in the program, or Unsubscribed costs. The Unsubscribed costs are recovered in one of two ways. The energy costs related to the PPA are recovered through SEA Factor. The revenue requirements related to the solar array owned by Minnesota Power will be recovered through the RRR Solar Factor.

Exhibit G-1 shows the monthly details from 2016 to 2020 of the subscribed cost tracker: the actual and budgeted revenue requirements for the solar array and the PPA; the actual and budgeted number of program subscriptions by option; the actual and budgeted revenue from subscriptions by option; and summary statistics on the subscriptions and subscribed costs.

Exhibit H-1 shows the monthly details from 2016 to 2020 of the remaining unsubscribed costs and how those are split for recovery either through the SEA or the Solar Factor.

Exhibit I-1 shows the various assumptions and inputs used in calculating the revenue requirements, including book and tax depreciation rates, and tax rates. The rates of return and tax rates previously shown in Exhibits D-2 and D-3 for Camp Ripley are also used in for the Community Solar Garden calculations and are not duplicated here.

Exhibit J-1 shows the solar array project Plant Additions, AFUDC, and Return on CWIP calculations. This exhibit shows the total capital expenditure, the amount of AFUDC included, the amount of internal costs excluded, the AFUDC on internal costs excluded, and the return on CWIP included in revenue requirements.

Exhibits J-2 shows the detailed revenue requirement calculations from 2016 to 2020 of the solar array project owned by Minnesota Power. The Current Return on CWIP begins August 2016 following the Commission approval of the Community Solar Garden project. The return on average rate base, depreciation expense, and Minnesota solar production tax components of revenue requirements begin when the project goes into service. The investment tax credit is currently expected to begin around 2028.

Exhibit J-3 summarizes the revenue requirement components of the solar array and the PPA, and based on the generation of each, applies the Solar Renewable Energy Credit (“SREC”), and calculates the monthly cost per kWh.

Exhibits K-1 to K-5 replicate the project costs, revenue requirements calculations, and subscription option pricing previously developed and approved in the various filings in the Community Solar Garden docket.

A general description of the Renewable Resources Rider revenue requirement components is provided below.

1. Return on Construction Work in Progress (CWIP)

Minnesota Power recorded capital expenditures related to the Renewable Resources Rider in Federal Energy Regulatory Commission (“FERC”) Account 107 – CWIP. Minnesota Power requested a current return on CWIP on the components that were not yet placed in-service beginning when cost recovery under the Rider was approved by the Commission. A return on CWIP was the only component of revenue requirements recovered under the Rider until the components not yet in-service were placed in-service. Consistent with the terms of the 2011 Transmission Cost Recovery Factor Filing²³ and

²³ Docket No. E015/M-11-695.

subsequent filings, internal capitalized costs were excluded from the CWIP balances as shown in Exhibits C-11, J-1, and K-1. In compliance with the terms of the 2013 Renewable Resources Factor Filing,²⁴ AFUDC on internal capitalized costs was excluded from CWIP balances.

a) Allowance for Funds Used During Construction (AFUDC)

The Company calculated AFUDC for the projects and recorded an offsetting regulatory liability (referred to as a “contra” entry) equaling 100 percent of the projects’ AFUDC excluding AFUDC on internal costs and included that regulatory liability as a reduction to rate base through an entry to “Pre-funded AFUDC Regulatory Liability.” After the projects were placed in-service, the amount of the Pre-funded AFUDC Regulatory Liability started being amortized over the lives of the projects.

In a December 2010 Order, FERC prescribed specific accounting treatment, which requires the Company to record the Pre-funded AFUDC Regulatory Liability by debiting Account 407.3, Regulatory Debits, and crediting Account 254, Other Regulatory Liabilities, in accordance with the instructions of those accounts. In addition, the Company started amortizing the Pre-funded AFUDC Regulatory Liability as an offset to depreciation expense by debiting Account 254 and crediting Account 407.4, Regulatory Credits. The Company maintained all necessary controls to ensure the amount of the Pre-funded AFUDC Regulatory Liability recorded in Account 254 includes the total amount of AFUDC accrued on the projects excluding AFUDC on internal costs. This FERC-approved methodology for the application of AFUDC is currently being applied to all Minnesota Power current cost recovery rider projects.

²⁴ Docket No. E015/M-13-410.

b) Return on Investment – CWIP

Revenue requirements during the construction phase of the projects were based on the average monthly CWIP balance. The Return on Investment – CWIP was calculated on the average of the beginning and ending monthly CWIP balance until the projects were placed in-service. The components of the revenue requirement included an after-tax return on equity component, current and deferred income taxes, and interest expense. The total annual revenue requirements were the sum of the monthly current return on CWIP calculations until the projects were placed in-service. At that time, the ending CWIP balance was transferred to plant in-service and Minnesota Power began to recover full revenue requirements. Internal capitalized costs and AFUDC on internal costs were excluded from the CWIP balances.

(i) Return on Equity Component

Three different rate of return calculations are utilized in this filing. Calculations prior to January 1, 2017 are based on the return on investment approved in Minnesota Power's 2010 rate case (Docket E015/GR-09-1151). From January 1, 2017 to December 31, 2017, the return on investment is based on Minnesota Power's last retail rate case prior to tax reform.²⁵ Starting January 1, 2018 and beyond, the return on investment is based on Minnesota Power's last retail rate case after tax reform. These three rate of return calculations are shown in Exhibit D-2, page 1 to 3. Minnesota Power used the average monthly CWIP balance multiplied by the after-tax equity return rate and the equity percentage of the allowed capital structure from the last rate case to calculate the return on equity component of the revenue requirement calculation.

*[Return on Equity Component = Average Monthly CWIP Balance X After-Tax
Equity Return Rate X Capital Structure Equity Percentage]*

(ii) Income Tax Expense Component

Minnesota Power included a component of the revenue requirement calculation to recover the effective rate of taxes. This represents both current and deferred income

²⁵ Docket No. E015/GR-16-664.

taxes. The income tax amount is based upon the Return on Equity component of the revenue requirement to equate it to a pretax amount.

*Prior to Tax Reform: [Income Taxes = Return on Equity Component X
1/(1-41.370%) X 41.370%]*

*After Tax Reform: [Income Taxes = Return on Equity Component X
1/(1-28.742%) X 28.742%]*

(iii) Interest Expense Component

Minnesota Power included a component of the revenue requirement calculation to recover an equivalent amount of interest expense that would be incurred given the investment in the projects. The interest component was calculated based on the average monthly CWIP balance times the debt rate and times the debt percentage of the allowed capital structures approved in the last two rate cases as described above.

*[Interest Expense = Average Monthly CWIP Balance X Debt Rate X Capital Structure
Debt Percentage]*

(iv) Property Taxes

Any Minnesota property taxes that Minnesota Power is required to pay on CWIP that is in-place are included in the project revenue requirements.

2. Other Revenue Requirements Prior to Commissioning

The Camp Ripley project has other revenue requirements included prior to the project commissioning. These are associated with the solar lease and include external project engineering, interest payments during construction, annual lead lease payments and land appraisal fee. The costs are included in revenue requirements in 2016 and are shown in Exhibit C-4, page 1 of 5.

3. Full Revenue Requirements – In-service

Full revenue requirements are based on the Original Installed Cost (“OIC”) of projects placed in-service. Internal capitalized costs and AFUDC on internal costs are excluded from the OIC balances as shown in Exhibits C-11 and J-1. As described in greater detail below, the in-service revenue requirements are calculated using the adjusted average monthly rate base for the projects plus related expenses. The components of the revenue requirements for the projects include an after-tax return on investment, current and deferred income taxes, interest expense, depreciation expense, property taxes, investment tax credit, solar production tax, solar renewable energy credit, and solar capacity benefit.

a) Adjusted Average Rate Base

Adjusted average rate base is calculated using the monthly balance of the projects’ OIC reduced by the accumulated depreciation for the projects. The adjusted average rate base is also adjusted for any differences between book and tax depreciation expense through accumulated deferred income taxes. Rate base is calculated to also include adjustments for eligible investment tax credit as well as excess deferred income tax related to the impact of Tax Reform.

b) Return on Equity Component

The return on investment calculation is based on the three different rate of returns as described above in the Return on CWIP section. Minnesota Power used the average monthly adjusted rate base multiplied by the after-tax equity return rate and the equity percentage of the allowed capital structure from the Company’s last rate cases as described above to calculate the return on equity component of revenue requirements.

*[Return on Equity Component = Average Monthly Adjusted Rate Base X
After-tax Equity Return Rate X Capital Structure Equity Percentage]*

c) Income Tax Expense Component

Minnesota Power included a component of the revenue requirement calculation to recover the effective rate of taxes. This represents both current and deferred income

taxes. The income tax amount is based upon the Return on Equity component of the revenue requirement to equate it to a pre-tax amount.

Prior to Tax Reform: [Income Taxes = Return on Equity Component X 1/(1-41.370%) X 41.370%]

After Tax Reform: [Income Taxes = Return on Equity Component X 1/(1-28.742%) X 28.742%]

d) Interest Expense Component

Minnesota Power included a component of the revenue requirement calculation to recover an equivalent amount of interest expense that would be incurred given the investment in the projects. The interest component is calculated based on the average monthly adjusted rate base times the debt rate times the debt percentage of the allowed capital structure from the Company's last two rate cases as described above.

[Interest Expense = Average Monthly Adjusted Rate Base X Debt Rate X Capital Structure Debt Percentage]

e) Depreciation Expense Component

Once the assets are placed in service, depreciation on the projects is recovered through the Rider. Depreciation expense is calculated on a straight line basis over the lives of the projects on the components and began as the assets were placed in-service.

f) Property Tax Component

Property taxes on the projects are included based upon the value of the property and applicable tax rates.

g) O&M Expense Component

Incremental O&M expenses related to the Camp Ripley Project are included in the calculation of revenue requirements. As incremental O&M expenses for the Community Solar Garden are incurred in the future they will also be included in the calculation of

revenue requirements. Because the Company excludes all solar costs from its rate cases, there is no double recovery of O&M or other solar costs.

h) Investment Tax Credits

The four Company owned Camp Ripley projects and one Company owned Community Solar Garden project qualified as renewable energy projects for Federal investment tax credits (“ITCs”) purposes. The projects qualified for \$142,804 of Federal ITCs under Internal Revenue Service (“IRS”) guidance. As a result of Minnesota Power’s tax net operating losses (“NOL”), the cash benefit of the federal ITCs from these projects has not been realized, but deferred for future utilization. Under IRS normalization rules Minnesota Power cannot begin to amortize the benefit of this new federal ITC until it is utilized in a subsequent tax year. Minnesota Power currently anticipates fully utilizing the NOL carryforward in approximately 2021, and at that time will begin using the Minnesota Power tax credit carryforwards. Minnesota Power has other tax credit carryforwards in addition to the ITCs. The tax credit carryforwards are used in a specific order that is determined by tax regulations. Based on this ordering, Minnesota Power anticipates using the Camp Ripley and Community Solar Garden ITC starting in approximately 2028. At that time Minnesota Power will begin amortizing the benefit of these federal ITCs to revenue requirements in a future factor filing.

i) Minnesota Solar Energy Production Tax

Minnesota Solar Energy Production Tax is included in revenue requirements for both the Camp Ripley Project and Community Solar Garden Project. The tax is currently calculated at a rate of \$1.20 per MWh.

j) Solar Renewable Energy Credit (SREC)

The revenue requirements of the Community Solar Garden are reduced by the SREC discount according to the April 4, 2017 Commission Order. The discount is calculated at the approved rate of \$2.00 per MWh for both the 1 MW PPA and 40 kW solar array generation as shown in Exhibit J-3.

When the unsubscribed costs of the 1 MW PPA were recovered through the SEA, those costs did not include the SREC discount. As shown below in Table 5, a SREC true-up has been calculated and netted against the unsubscribed costs to be recovered through the 2020 Solar Factor. The net unsubscribed costs to be recovered through the Solar Factor are shown in Exhibit F-1.

Table 5 - SREC True-up for Unsubscribed Costs in SEA

Month	Unsubscribed PPA Costs with SREC Discusion1/	Actual Unsubscribed PPA Costs Recovered via SEA without SREC Discount
December - 17	\$ 427.62	\$ 436.36
January - 18	\$ 1,488.01	\$ 1,517.34
February - 18	\$ 3,664.86	\$ 3,737.09
March - 18	\$ 5,654.79	\$ 5,766.21
April - 18	\$ 5,324.30	\$ 5,429.22
May - 18	\$ 4,480.21	\$ 4,568.54
June - 18	\$ 3,054.99	\$ 3,115.16
July - 18	\$ 2,875.79	\$ 2,932.47
August - 18	\$ 970.24	\$ 989.37
September - 18	\$ 212.29	\$ 216.45
October - 18	\$ -	\$ (0.05)
November - 18	\$ -	\$ (0.01)
December - 18	\$ -	\$ 0.05
Total	\$ 28,153.10	\$ 28,708.20
Summary		
Unsubscribed PPA with SREC Discount		\$ 28,153.10
Recovered via SEA without Discount		\$ (28,708.20)
True-Up via Solar Factor		\$ (555.10)

F. Rate Calculation and Customer Impact

Minnesota Power has calculated its proposed 2020 Solar Factors as shown in Exhibit A-1. Minn. Stat. § 216B.1645, subd. 2a(b)(3). Exhibit B-1, page 1, summarizes the revenue requirements, cost allocation, and rate design for the 2020 Solar Factor. Minnesota Power proposes to apply a straight energy ($\$/kWh$) adder for each retail rate class. Specifically, the factors are calculated as an average energy-based ($\$/kWh$) charge consisting of the projected revenue requirements for each class divided by the energy

(kWh) sales for each class for the SES-Paying customers and SES-Exempt customers from Minnesota Power's 2020 budget.

Minnesota Power has utilized the appropriate authorized rates of return as described above. Refer to Exhibit D-2 for authorized rates of return. Refer to Exhibit D-4 for the energy allocation factors based on Minnesota Power's 2016 most recent approved retail rate case.

1. Tracker Mechanism

In support of the Solar Renewable Factor filings, Minnesota Power has implemented a tracker mechanism to account for the balance of actual revenue requirements and cash collected from customers. The trackers indicate the actual monthly revenue requirements, actual cash collections, and over/under balances. Upon approval of the 2020 Solar Factors and receipt of actual cash collection, Minnesota Power will separately track the revenue requirements and cash collection for SES-Exempt customers as these relate to the allocation of solar capacity benefits approved by the Commission in the Company's 2016 rate case.

2. Deferred Taxes

a) Pro rata calculation

Under Internal Revenue Code Section 167(1), rate-regulated utilities that utilize accelerated tax depreciation are required to use a normalization method of accounting. If a future test year, or a part historical and part future test year is utilized when determining the reserve for deferred taxes for the reduction of rate base, then a specific pro rata calculation must be utilized to avoid a normalization violation. In this Solar Factor current cost recovery filing, the Company is utilizing a current 2020 test year, and therefore no pro rata calculation is required for this current cost recovery filing.

b) Tax Reform

In Commission Docket No. G-999/CI-17-895, *In the Matter of a Commission Investigation into the Effects on Electric and Natural Gas Utility Rates and Services of the 2017 Federal*

Tax Act, the Commission ordered²⁶ Minnesota Power to return its Tax Cuts and Jobs Act benefits of the excess accumulated deferred income taxes (“ADIT”) impacts that existed at December 31, 2017 in a separate rider, as final rates in the most recent rate case were already implemented. Minnesota Power has implemented the rider and is returning all of the excess ADIT benefits through that rider. As all solar projects were excluded from the Company’s 2017 rate case, there are additional excess ADIT associated with the solar projects in this filing. The Company has therefore adjusted the deferred income taxes to account for the excess ADIT impacts in this rider.

3. Customer Impact

Table 6 below summarizes the estimated rate impacts by customer class assuming the 2020 Solar Factors are implemented on January 1, 2021. Based on the above assumptions, SES-Paying classes would have a rate increase ranging from 0.301 cents per kWh to 0.349 cents per kWh. For an average residential customer this would be about a 2.80% increase or about \$2.18 more per month. SES-Exempt classes would have a rate increase of 0.014 cents per kWh. The LP (Large Power) average class rate would increase by about 0.22 percent.

²⁶ Order dated May 10, 2019.

Table 6- Estimated Customer Impact

<u>Rate Class Impacts /1</u>	SES-Paying Customers	SES-Exempt Customers
Residential (average current rate, cents/kWh)	10.764	
Increase (cents/kWh) /2	0.301	
Increase (%)	2.80%	
Average Impact (\$ / month)	\$2.18	
General Service (average current rate, cents/kWh)	10.727	
Increase (cents/kWh) /2	0.278	
Increase (%)	2.59%	
Average Impact (\$ / month)	\$7.60	
Large Light & Power (average current rate, cents/kWh)	8.164	8.164
Increase (cents/kWh) /2	0.323	0.014
Increase (%)	3.96%	0.17%
Average Impact (\$ / month)	\$793.24	\$52.90
Large Power (average current rate, cents/kWh)		6.350
Increase (Demand & Energy Combined) (cents/kWh) /2		0.014
Increase (%)		0.22%
Average Impact (\$ / month)		\$7,098
Lighting (average current rate, cents/kWh)	16.056	
Increase (cents/kWh) /2	0.349	
Increase (%)	2.17%	
Average Impact (\$ / month)	\$1.18	

Notes:

1/ Average current rates are 2020 estimated rates based on Final 2017 TY General Rates in 2016 Rate Case (E-015/GR-16-664) without riders adjusted to include current rider rates.

Current rider rates included Renewable Resources Rider rates, Transmission Cost Recovery Rider rates, Boswell 4 Emission Reduction rates, Conservation Program Adjustment rates, and estimated 2020 Fuel and Purchased Energy. Average \$/month impact based on 2020 budgeted billing units.

2/ Increase shown is the increase due to the new Solar factor being implemented.

V. CONCLUSION

Minnesota Power views solar energy as an important and growing part of the renewable energy landscape. The Camp Ripley Project, the 40 kW CSG solar array and SolarSense Program are components of the Company's strategy for providing customers with solar energy options that work for them. The costs presented in this Petition are reasonable and have been prudently incurred. Therefore, the Company respectfully requests that the Commission approve the proposed 2020 Solar Factor.

Dated: June 30, 2020

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Lori Hoyum".

Lori Hoyum
Regulatory Compliance Administrator

RIDER FOR RENEWABLE RESOURCES-SOLAR FACTOR ADJUSTMENT

APPLICATION

Applicable to electric service under all Company's Retail Rate Schedules except Competitive Rate Schedules Rate Codes 73 and 79. This Rider shall be applicable to customers who are not exempt from Solar Energy Standard (SES) obligations under Minnesota Statutes, Section 216B.1691, subd. 2(f). During the 2013 Minnesota legislative session, Minnesota Statutes Section 216B.1691, the statute establishing Minnesota's Renewable Standard, was amended to include an additional SES under Minnesota Statutes Section 216B.1691, Subd. 2f. Included in Minnesota Statutes, Section 216B.1691, subd. 2f is a provision exempting retail electric sales to certain customers, namely large iron mining and paper production businesses, from the total retail electric sales calculation of a public utility. Per subdivision 2f(f), exempted customers are:

- (1) an iron mining extraction and processing facility, including a scam mining facility as defined in Minnesota Rules, part 6130.0100, subpart 16; or
- (2) a paper mill, wood products manufacturer, sawmill, or oriented strand board manufacturer.

Exempted customers cannot be charged for any costs specific to satisfying the Solar Energy Standard.

The solar capacity benefit charge associated with the Camp Ripley Solar Project is applied to exempt customers as they share in these benefits.

ADJUSTMENT

Customers' monthly bills will be adjusted in accordance with each customer's status per Minnesota Statutes, Section 216B.1691, Subd. 2f. The following charges are applicable in addition to all charges for service being taken under the Company's standard rate schedules.

	SES-Paying Customers	SES-Exempt Customers
Residential Customers	0.301¢ per kWh for all kWh	
General Service Customers	0.278¢ per kWh for all kWh	
Large Light & Power Customers	0.323¢ per kWh for all kWh	0.014¢ per kWh for all kWh

Filing Date _____ **MPUC Docket No.** _____

Effective Date _____ **Order Date** _____

Approved by: David R. Moeller
David R. Moeller
Senior Attorney & Director
of Regulatory Compliance

**MINNESOTA POWER
ELECTRIC RATE BOOK - VOLUME**

**SECTION V PAGE NO. 105.0
REVISION ORIGINAL**

Large Power Customers

0.014¢ per kWh for billing
Demand & Energy

Lighting Customers

0.349¢ per kWh
for all kWh

Filing Date _____ MPUC Docket No. _____
Effective Date _____ Order Date _____

Approved by: David R. Moeller
David R. Moeller
Senior Attorney & Director
of Regulatory Compliance

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Summary Revenue Requirements and Rate Design
Camp Ripley, Community Solar Garden, and Solar Sense

Total 2020 Solar Factor Filing		SES-Paying Customers	SES-Exempt Customers
<hr/>			
Total Revenue Requirements	1/		
Residential		\$ 3,145,460	\$ -
General Service		\$ 1,951,887	\$ -
Large Light & Power		\$ 4,214,720	\$ 2,554
Large Power		\$ -	\$ 765,556
Lighting		\$ 71,059	\$ -
Total		<u>\$ 9,383,126</u>	<u>\$ 768,110</u>
Billing 2020 Units	2/		
Residential	kWh	1,046,739,000	-
General Service	kWh	701,891,000	4,597,000
Large Light & Power	kWh	1,306,023,000	18,138,000
Large Power	kWh	-	5,475,441,000
Lighting	kWh	<u>20,366,000</u>	<u>53,000</u>
Total	kWh	3,075,019,000	5,498,229,000
Proposed Billing Factors		Proposed 1/1/2021	
Residential	¢/kWh	0.301	-
General Service	¢/kWh	0.278	-
Large Light & Power	¢/kWh	0.323	0.014
Large Power	¢/kWh	-	0.014
Lighting	¢/kWh	0.349	-

1/ Refer to Exhibit B-2.

2/ 2020 Budgeted billing units.

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Summary Revenue Requirements
Camp Ripley, Community Solar Garden, and Solar Sense

Camp Ripley		SES-Paying Customers	SES-Exempt Customers
<hr/>			
Net Revenue Requirements (2016-2020)	1/		
Residential		\$ 2,136,260	\$ -
General Service		\$ 1,315,098	\$ -
Large Light & Power		\$ 2,880,823	\$ 2,554
Large Power		\$ -	\$ 765,556
Lighting		\$ 50,052	\$ -
Total		<u>\$ 6,382,233</u>	<u>\$ 768,110</u>
Community Solar Garden			
<hr/>			
Total Revenue Requirements (2016-2020)	2/		
Residential		\$ 5,712	\$ -
General Service		\$ 3,604	\$ -
Large Light & Power		\$ 7,550	\$ -
Large Power		\$ -	\$ -
Lighting		\$ 119	\$ -
Total		<u>\$ 16,984</u>	<u>\$ -</u>
SolarSense			
<hr/>			
Total Revenue Requirements (2017-2020)			
Residential		\$ 1,003,489	\$ -
General Service		\$ 633,186	\$ -
Large Light & Power		\$ 1,326,348	\$ -
Large Power		\$ -	\$ -
Lighting		\$ 20,887	\$ -
Total		<u>\$ 2,983,909</u>	<u>\$ -</u>
Total 2020 Solar Factor Filing			
<hr/>			
Total Revenue Requirements			
Residential		\$ 3,145,460	\$ -
General Service		\$ 1,951,887	\$ -
Large Light & Power		\$ 4,214,720	\$ 2,554
Large Power		\$ -	\$ 765,556
Lighting		\$ 71,059	\$ -
Total		<u>\$ 9,383,126</u>	<u>\$ 768,110</u>

1/ Refer to Exhibit C-1.

2/ Refer to Exhibit F-1 for revenue requirements and Exhibit D-4 for allocation factors.

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Summary Camp Ripley Net Revenue Requirements

<u>Camp Ripley</u>		SES-Paying Customers	SES-Exempt Customers
Revenue Requirements (2015-2020)	1/ Allocation 2/		\$ -
Residential	33.630%	\$ 2,404,660	\$ -
General Service	21.220%	\$ 1,517,303	\$ -
Large Light & Power	44.450%	\$ 3,178,327	\$ -
Large Power	0.000%	\$ -	\$ -
Lighting	0.700%	\$ 50,052	\$ -
Total	100.000%	\$ 7,150,343	\$ -
Solar Capacity Benefit Collection (Credit)	3/		
Residential		\$ (268,401)	\$ -
General Service		\$ (202,205)	\$ -
Large Light & Power		\$ (297,504)	\$ 2,554
Large Power		\$ -	\$ 765,556
Lighting		\$ -	\$ -
Total		\$ (768,110)	\$ 768,110
Net Revenue Requirements			
Residential		\$ 2,136,260	\$ -
General Service		\$ 1,315,098	\$ -
Large Light & Power		\$ 2,880,823	\$ 2,554
Large Power		\$ -	\$ 765,556
Lighting		\$ 50,052	\$ -
Total		\$ 6,382,233	\$ 768,110

1/ Refer to Exhibit C-2.

2/ Refer to Exhibit D-4.

3/ Refer to Exhibit E-2.

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Summary Annual Revenue Requirements all Projects

Section	Line	Actual 2016	Actual 2017	Actual 2018	Actual 2019	Budget 2020	Total
A	Generation (MWh)	1,720	17,066	16,679	14,011	16,510	65,985
B	Solar Lease	\$ 311,816	\$ 1,652,270	\$ 1,600,192	\$ 1,602,012	\$ 1,512,051	\$ 6,678,341
C	Project 107804	\$ 31,870	\$ 85,312	\$ 79,046	\$ 76,261	\$ 74,132	\$ 346,620
D	Project 107805	\$ 5,217	\$ 12,732	\$ 11,494	\$ 11,079	\$ 10,894	\$ 51,416
E	Project 107806	\$ 2,199	\$ 6,477	\$ 5,866	\$ 5,647	\$ 5,553	\$ 25,741
F	Project 108533	\$ 7,022	\$ 11,635	\$ 10,339	\$ 9,846	\$ 9,384	\$ 48,226
G	Solar Asset (beginning 1/1/2027)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
H	Total	\$ 358,125	\$ 1,768,424	\$ 1,706,936	\$ 1,704,845	\$ 1,612,013	\$ 7,150,343

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Monthly Revenue Requirements All Projects

Monthly revenue requirements all projects

Section	Line		Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
A	Generation (MWh)		0	0	0	0	0	0	0	0	0	0	0	0
B	Solar Lease	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
C	Project 107804	1/ \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
D	Project 107805	1/ \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
E	Project 107806	1/ \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
F	Project 108533	1/ \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
G	Solar Asset (beginning 1/1/2027)	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
H	Total	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-

1/ Refer to Exhibit C-11 for Project names

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Monthly Revenue Requirements All Projects

Monthly revenue requirements all projects

Section	Line	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
A	Generation (MWh)	0	0	0	0	0	0	0	0	0	356	865	499
B	Solar Lease	\$ -	\$ 1,126	\$ 5,089	\$ 16,768	\$ 12,713	\$ 20,347	\$ 4,426	\$ 29,738	\$ 28,287	\$ 37,630	\$ 192,014	\$ (36,323)
C	Project 107804	1/ \$ -	\$ 63	\$ 153	\$ 250	\$ 462	\$ 1,105	\$ 2,039	\$ 3,744	\$ 5,243	\$ 5,963	\$ 6,435	\$ 6,411
D	Project 107805	1/ \$ -	\$ 404	\$ 404	\$ 404	\$ 404	\$ 404	\$ 404	\$ 404	\$ 434	\$ 523	\$ 676	\$ 756
E	Project 107806	1/ \$ -	\$ 5	\$ 13	\$ 42	\$ 91	\$ 152	\$ 219	\$ 269	\$ 320	\$ 353	\$ 364	\$ 372
F	Project 108533	1/ \$ -	\$ -	\$ 118	\$ 293	\$ 417	\$ 510	\$ 542	\$ 856	\$ 1,544	\$ 1,487	\$ 624	\$ 631
G	Solar Asset (beginning 1/1/2027)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
H	Total	\$ -	\$ 1,598	\$ 5,776	\$ 17,758	\$ 14,087	\$ 22,518	\$ 7,631	\$ 35,011	\$ 35,829	\$ 45,957	\$ 200,114	\$ (28,154)

1/ Refer to Exhibit C-11 for Project names

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Monthly Revenue Requirements All Projects

Monthly revenue requirements all projects

Section	Line		Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
A	Generation (MWh)		843	1,410	1,720	1,561	1,804	1,837	2,150	1,673	1,617	1,291	834	326
B	Solar Lease	\$	40,651	\$ 162,111	\$ 84,427	\$ 233,119	\$ 153,562	\$ 142,059	\$ 140,826	\$ 149,644	\$ 52,236	\$ 123,231	\$ 254,649	\$ 115,755
C	Project 107804	1/ \$	6,874	\$ 6,859	\$ 6,844	\$ 6,827	\$ 6,810	\$ 7,094	\$ 7,378	\$ 7,362	\$ 7,344	\$ 7,325	\$ 7,307	\$ 7,289
D	Project 107805	1/ \$	1,057	\$ 1,063	\$ 1,069	\$ 1,068	\$ 1,066	\$ 1,064	\$ 1,062	\$ 1,060	\$ 1,058	\$ 1,057	\$ 1,055	\$ 1,053
E	Project 107806	1/ \$	542	\$ 543	\$ 543	\$ 542	\$ 541	\$ 541	\$ 540	\$ 539	\$ 538	\$ 537	\$ 536	\$ 535
F	Project 108533	1/ \$	997	\$ 993	\$ 988	\$ 983	\$ 977	\$ 972	\$ 967	\$ 962	\$ 957	\$ 951	\$ 946	\$ 941
G	Solar Asset (beginning 1/1/2027)	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
H	Total	\$	50,120	\$ 171,569	\$ 93,871	\$ 242,539	\$ 162,957	\$ 151,730	\$ 150,773	\$ 159,566	\$ 62,132	\$ 133,101	\$ 264,493	\$ 125,573

1/ Refer to Exhibit C-11 for Project names

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Monthly Revenue Requirements All Projects

Monthly revenue requirements all projects

Section	Line	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
A	Generation (MWh)	867	1,321	1,650	1,843	2,009	1,754	2,068	1,631	1,377	1,129	606	424
B	Solar Lease	\$ 115,978	\$ 150,847	\$ 119,749	\$ 150,350	\$ 117,349	\$ 117,043	\$ 123,920	\$ 156,670	\$ 137,374	\$ 117,437	\$ 123,278	\$ 170,197
C	Project 107804	1/ \$ 6,671	\$ 6,656	\$ 6,641	\$ 6,625	\$ 6,610	\$ 6,595	\$ 6,580	\$ 6,564	\$ 6,549	\$ 6,534	\$ 6,518	\$ 6,503
D	Project 107805	1/ \$ 966	\$ 964	\$ 963	\$ 961	\$ 960	\$ 959	\$ 957	\$ 956	\$ 954	\$ 953	\$ 952	\$ 950
E	Project 107806	1/ \$ 493	\$ 492	\$ 491	\$ 491	\$ 490	\$ 489	\$ 488	\$ 488	\$ 487	\$ 486	\$ 486	\$ 485
F	Project 108533	1/ \$ 881	\$ 878	\$ 874	\$ 870	\$ 867	\$ 863	\$ 860	\$ 856	\$ 853	\$ 849	\$ 846	\$ 842
G	Solar Asset (beginning 1/1/2027)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
H	Total	\$ 124,988	\$ 159,837	\$ 128,718	\$ 159,298	\$ 126,276	\$ 125,948	\$ 132,805	\$ 165,534	\$ 146,217	\$ 126,259	\$ 132,079	\$ 178,977

1/ Refer to Exhibit C-11 for Project names

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Monthly Revenue Requirements All Projects

Monthly revenue requirements all projects

Section	Line	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
A	Generation (MWh)	900	326	1,204	1,379	1,624	1,812	1,881	1,889	1,160	962	487	389
B	Solar Lease	\$ 116,359	\$ 115,885	\$ 151,753	\$ 117,099	\$ 152,067	\$ 160,229	\$ 82,184	\$ 152,623	\$ 195,935	\$ 141,213	\$ 92,022	\$ 124,643
C	Project 107804	1/ \$ 6,438	\$ 6,423	\$ 6,408	\$ 6,393	\$ 6,378	\$ 6,363	\$ 6,348	\$ 6,333	\$ 6,318	\$ 6,303	\$ 6,288	\$ 6,273
D	Project 107805	1/ \$ 931	\$ 929	\$ 928	\$ 927	\$ 925	\$ 924	\$ 923	\$ 921	\$ 920	\$ 919	\$ 917	\$ 916
E	Project 107806	1/ \$ 474	\$ 474	\$ 473	\$ 472	\$ 472	\$ 471	\$ 470	\$ 470	\$ 469	\$ 468	\$ 467	\$ 467
F	Project 108533	1/ \$ 839	\$ 835	\$ 832	\$ 829	\$ 825	\$ 822	\$ 819	\$ 816	\$ 812	\$ 809	\$ 806	\$ 802
G	Solar Asset (beginning 1/1/2027)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
H	Total	\$ 125,041	\$ 124,546	\$ 160,394	\$ 125,719	\$ 160,667	\$ 168,808	\$ 90,744	\$ 161,162	\$ 204,453	\$ 149,711	\$ 100,500	\$ 133,100

1/ Refer to Exhibit C-11 for Project names

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Monthly Revenue Requirements All Projects

Monthly revenue requirements all projects

Section	Line	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
A	Generation (MWh)	868	1,117	1,340	1,585	1,777	1,821	1,952	1,790	1,415	1,379	766	699
B	Solar Lease	\$ 116,194	\$ 118,793	\$ 121,911	\$ 119,704	\$ 133,435	\$ 171,888	\$ 120,245	\$ 120,050	\$ 119,350	\$ 132,707	\$ 121,683	\$ 116,091
C	Project 107804	1/ \$ 6,259	\$ 6,244	\$ 6,229	\$ 6,215	\$ 6,200	\$ 6,185	\$ 6,170	\$ 6,156	\$ 6,141	\$ 6,126	\$ 6,111	\$ 6,096
D	Project 107805	1/ \$ 915	\$ 914	\$ 912	\$ 911	\$ 910	\$ 908	\$ 907	\$ 906	\$ 905	\$ 903	\$ 902	\$ 901
E	Project 107806	1/ \$ 466	\$ 466	\$ 465	\$ 464	\$ 464	\$ 463	\$ 462	\$ 462	\$ 461	\$ 460	\$ 460	\$ 459
F	Project 108533	1/ \$ 799	\$ 796	\$ 793	\$ 790	\$ 787	\$ 784	\$ 780	\$ 777	\$ 774	\$ 771	\$ 768	\$ 765
G	Solar Asset (beginning 1/1/2027)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
H	Total	\$ 124,634	\$ 127,213	\$ 130,310	\$ 128,084	\$ 141,795	\$ 180,228	\$ 128,565	\$ 128,350	\$ 127,630	\$ 140,968	\$ 129,923	\$ 124,312

1/ Refer to Exhibit C-11 for Project names

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Solar Lease Revenue Requirements

Solar Lease

Solar Lease Month		Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
A	Generation												
	1 Monthly Energy (MWh)	0	0	0	0	0	0	0	0	0	356	865	499
	2 MN Solar Energy Production Tax Rate (\$/MWh)	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20
	3 MN Solar Energy Production Tax (\$)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 427.20	\$ 1,037.82	\$ 598.89
B	Operation & Maintenance												
	1 O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C	Project Costs												
	1 External Project Engineering	-	-	3,857	4,679	10,393	16,800	4,426	15,414	16,572	17,194	7,005	605
	2 Interest Payments During Construction	-	1,126	1,232	2,088	2,320	3,547	-	14,324	11,715	20,009	28,172	(37,527)
	3 Annual Land Lease Payments	-	-	-	-	-	-	-	-	-	-	155,800	-
	4 Land Value Appraisal Fee	-	-	-	10,000	-	-	-	-	-	-	-	-
	5 Monthly Solar Lease Payments	-	-	-	-	-	-	-	-	-	-	-	-
	6 Total	\$ -	\$ 1,126	\$ 5,089	\$ 16,768	\$ 12,713	\$ 20,347	\$ 4,426	\$ 29,738	\$ 28,287	\$ 37,203	\$ 190,977	\$ (36,922)
D	Total Solar Lease revenue requirements	\$ -	\$ 1,126	\$ 5,089	\$ 16,768	\$ 12,713	\$ 20,347	\$ 4,426	\$ 29,738	\$ 28,287	\$ 37,630	\$ 192,014	\$ (36,323)

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Solar Lease Revenue Requirements

Solar Lease													
Solar Lease Month		1	2	3	4	5	6	7	8	9	10	11	12
Section	Line	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
A	Generation												
	1 Monthly Energy (MWh)	843	1,410	1,720	1,561	1,804	1,837	2,150	1,673	1,617	1,291	834	326
	2 MN Solar Energy Production Tax Rate (\$/MWh)	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20
	3 MN Solar Energy Production Tax (\$)	\$ 1,011.95	\$ 1,691.42	\$ 2,063.79	\$ 1,873.15	\$ 2,165.18	\$ 2,204.22	\$ 2,580.10	\$ 2,007.98	\$ 1,940.20	\$ 1,548.69	\$ 1,001.24	\$ 390.86
B	Operation & Maintenance												
	1 O&M	\$ 3,179	\$ 8,119	\$ 5,917	\$ 583	\$ 36,545	\$ 25,003	\$ 23,394	\$ 32,783	\$ 13,086	\$ 7,031	\$ 57,877	\$ 511
C	Project Costs												
	1 External Project Engineering	-	-	-	-	-	-	-	-	-	-	-	-
	2 Interest Payments During Construction	36,460	-	-	-	-	-	-	-	-	-	-	-
	3 Annual Land Lease Payments	-	-	-	-	-	-	-	-	-	-	3,075	-
	4 Land Value Appraisal Fee	-	-	-	-	-	-	-	-	-	-	-	-
	5 Monthly Solar Lease Payments	-	152,300	76,446	230,663	114,852	114,852	114,852	114,852	37,210	114,651	192,696	114,852
	6 Total	\$ 36,460	\$ 152,300	\$ 76,446	\$ 230,663	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 37,210	\$ 114,651	\$ 195,771	\$ 114,852
D	Total Solar Lease revenue requirements	\$ 40,651	\$ 162,111	\$ 84,427	\$ 233,119	\$ 153,562	\$ 142,059	\$ 140,826	\$ 149,644	\$ 52,236	\$ 123,231	\$ 254,649	\$ 115,755

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Solar Lease Revenue Requirements

Solar Lease													
Solar Lease Month		13	14	15	16	17	18	19	20	21	22	23	24
Section	Line	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
A	Generation												
	1 Monthly Energy (MWh)	867	1,321	1,650	1,843	2,009	1,754	2,068	1,631	1,377	1,129	606	424
	2 MN Solar Energy Production Tax Rate (\$/MWh)	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20
	3 MN Solar Energy Production Tax (\$)	\$ 1,040.20	\$ 1,584.88	\$ 1,980.55	\$ 2,211.97	\$ 2,411.11	\$ 2,104.35	\$ 2,481.49	\$ 1,957.31	\$ 1,651.88	\$ 1,354.86	\$ 727.17	\$ 508.59
B	Operation & Maintenance												
	1 O&M	\$ 86	\$ 34,410	\$ 2,916	\$ 33,286	\$ 86	\$ 86	\$ 6,587	\$ 39,860	\$ 20,870	\$ 1,230	\$ 4,546	\$ 54,836
C	Project Costs												
	1 External Project Engineering	-	-	-	-	-	-	-	-	-	-	-	-
	2 Interest Payments During Construction	-	-	-	-	-	-	-	-	-	-	-	-
	3 Annual Land Lease Payments	-	-	-	-	-	-	-	-	-	-	3,152	-
	4 Land Value Appraisal Fee	-	-	-	-	-	-	-	-	-	-	-	-
	5 Monthly Solar Lease Payments	114,852	114,852	114,852	114,852	114,852	114,852	114,852	114,852	114,852	114,852	114,852	114,852
	6 Total	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 118,004	\$ 114,852
D	Total Solar Lease revenue requirements	\$ 115,978	\$ 150,847	\$ 119,749	\$ 150,350	\$ 117,349	\$ 117,043	\$ 123,920	\$ 156,670	\$ 137,374	\$ 117,437	\$ 123,278	\$ 170,197

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Solar Lease Revenue Requirements

Solar Lease		25	26	27	28	29	30	31	32	33	34	35	36
Section	Line	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
A	Generation												
	1 Monthly Energy (MWh)	900	326	1,204	1,379	1,624	1,812	1,881	1,889	1,160	962	487	389
	2 MN Solar Energy Production Tax Rate (\$/MWh)	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20
	3 MN Solar Energy Production Tax (\$)	\$ 1,079.71	\$ 391.59	\$ 1,444.64	\$ 1,654.51	\$ 1,948.34	\$ 2,174.18	\$ 2,257.66	\$ 2,266.33	\$ 1,391.88	\$ 1,153.95	\$ 584.07	\$ 466.31
B	Operation & Maintenance												
	1 O&M	\$ 427	\$ 641	\$ 35,456	\$ 592	\$ 35,266	\$ 43,202	\$ (34,925)	\$ 35,504	\$ 79,690	\$ 21,976	\$ (23,414)	\$ 9,324
C	Project Costs												
	1 External Project Engineering	-	-	-	-	-	-	-	-	-	-	-	-
	2 Interest Payments During Construction	-	-	-	-	-	-	-	-	-	-	-	-
	3 Annual Land Lease Payments	-	-	-	-	-	-	-	-	-	3,231	-	-
	4 Land Value Appraisal Fee	-	-	-	-	-	-	-	-	-	-	-	-
	5 Monthly Solar Lease Payments	114,852	114,852	114,852	114,852	114,852	114,852	114,852	114,852	114,852	114,852	114,852	114,852
	6 Total	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 118,083	\$ 114,852	\$ 114,852
D	Total Solar Lease revenue requirements	\$ 116,359	\$ 115,885	\$ 151,753	\$ 117,099	\$ 152,067	\$ 160,229	\$ 82,184	\$ 152,623	\$ 195,935	\$ 141,213	\$ 92,022	\$ 124,643

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Solar Lease Revenue Requirements

Solar Lease		37	38	39	40	41	42	43	44	45	46	47	48
Section	Line	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
A	Generation												
	1 Monthly Energy (MWh)	868	1,117	1,340	1,585	1,777	1,821	1,952	1,790	1,415	1,379	766	699
	2 MN Solar Energy Production Tax Rate (\$/MWh)	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20
	3 MN Solar Energy Production Tax (\$)	\$ 1,041.89	\$ 1,340.98	\$ 1,608.38	\$ 1,902.03	\$ 2,133.00	\$ 2,185.76	\$ 2,342.34	\$ 2,147.61	\$ 1,697.44	\$ 1,654.98	\$ 918.83	\$ 838.81
B	Operation & Maintenance												
	1 O&M	\$ 300	\$ 2,600	\$ 5,450	\$ 2,950	\$ 16,450	\$ 54,850	\$ 3,050	\$ 3,050	\$ 2,800	\$ 16,200	\$ 2,600	\$ 400
C	Project Costs												
	1 External Project Engineering	-	-	-	-	-	-	-	-	-	-	-	-
	2 Interest Payments During Construction	-	-	-	-	-	-	-	-	-	-	-	-
	3 Annual Land Lease Payments	-	-	-	-	-	-	-	-	-	-	3,311	-
	4 Land Value Appraisal Fee	-	-	-	-	-	-	-	-	-	-	-	-
	5 Monthly Solar Lease Payments	114,852	114,852	114,852	114,852	114,852	114,852	114,852	114,852	114,852	114,852	114,852	114,852
	6 Total	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 114,852	\$ 118,164	\$ 114,852
D	Total Solar Lease revenue requirements	\$ 116,194	\$ 118,793	\$ 121,911	\$ 119,704	\$ 133,435	\$ 171,888	\$ 120,245	\$ 120,050	\$ 119,350	\$ 132,707	\$ 121,683	\$ 116,091

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Support for Solar Asset Operation and Maintenance Expense

Support for Solar Asset O&M

Lease/Asset Year

1

	1/1/2017	2/1/2017	3/1/2017	4/1/2017	5/1/2017	6/1/2017	7/1/2017	8/1/2017	9/1/2017	10/1/2017	11/1/2017	12/1/2017
Annual O&M nominal												
Site Restoration												
Replacements												
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual O&M 1/	\$ 3,179	\$ 8,119	\$ 5,917	\$ 583	\$ 36,545	\$ 25,003	\$ 23,394	\$ 32,783	\$ 13,086	\$ 7,031	\$ 57,877	\$ 511

1/ Escalated at 3% per year for out years

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Support for Solar Asset Operation and Maintenance Expense

Support for Solar Asset O&M

Lease/Asset Year

2

	1/1/2018	2/1/2018	3/1/2018	4/1/2018	5/1/2018	6/1/2018	7/1/2018	8/1/2018	9/1/2018	10/1/2018	11/1/2018	12/1/2018
Annual O&M nominal												
Site Restoration												
Replacements												
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual O&M 1/	\$ 86	\$ 34,410	\$ 2,916	\$ 33,286	\$ 86	\$ 86	\$ 6,587	\$ 39,860	\$ 20,870	\$ 1,230	\$ 4,546	\$ 57,988

1/ Escalated at 3% per year for out years

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Support for Solar Asset Operation and Maintenance Expense

Support for Solar Asset O&M

Lease/Asset Year

3

	1/1/2019	2/1/2019	3/1/2019	4/1/2019	5/1/2019	6/1/2019	7/1/2019	8/1/2019	9/1/2019	10/1/2019	11/1/2019	12/1/2019
Annual O&M nominal												
Site Restoration												
Replacements												
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual O&M 1/	\$ 427	\$ 641	\$ 35,456	\$ 592	\$ 35,266	\$ 43,202	\$ (34,925)	\$ 35,504	\$ 79,690	\$ 25,207	\$ (23,414)	\$ 9,324

1/ Escalated at 3% per year for out years

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Support for Solar Asset Operation and Maintenance Expense

Support for Solar Asset O&M

Lease/Asset Year

4

	1/1/2020	2/1/2020	3/1/2020	4/1/2020	5/1/2020	6/1/2020	7/1/2020	8/1/2020	9/1/2020	10/1/2020	11/1/2020	12/1/2020
Annual O&M nominal												
Site Restoration												
Replacements												
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual O&M 1/	\$ 300	\$ 2,600	\$ 5,450	\$ 2,950	\$ 16,450	\$ 54,850	\$ 3,050	\$ 3,050	\$ 2,800	\$ 16,200	\$ 2,600	\$ 400

1/ Escalated at 3% per year for out years

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Project 107804 Revenue Requirements

107804 - In Service 10/14/2016

Section	Line	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
A	Book Basis of Property												
	1 CWIP	\$ 180	\$ 12,166	\$ 18,125	\$ 31,328	\$ 59,927	\$ 158,418	\$ 244,382	\$ 495,254	\$ 540,471			
	2 Plant in Service										\$ 541,739	\$ 541,835	\$ 541,932
	3 Accumulated Depreciation										\$ 1,016	\$ 3,047	\$ 5,080
	4 Net Plant										\$ 540,724	\$ 538,787	\$ 536,852
	5 Book Depreciation Rate										0.375%	0.375%	0.375%
B	Tax Basis of Property												
	1 Investment Tax Credit										\$ 81,261	\$ 14	\$ 15
	2 Reduction to Book and Tax Basis										\$ 40,630	\$ 7	\$ 7
	3 Adjusted Book and Tax Basis for Deferred Taxes										\$ 501,109	\$ 88	\$ 90
	4 Bonus Depreciation										\$ 250,555	\$ 44	\$ 45
	5 Net Depreciable Plant										\$ 250,555	\$ 250,599	\$ 250,643
	6 Book Depreciation Rate										0.375%	0.375%	0.375%
	7 Book Style Depreciation for Deferred Taxes										\$ 940	\$ 1,879	\$ 1,880
	8 Accumulated Book Depreciation										\$ 940	\$ 2,819	\$ 4,699
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation										\$ 253,686	\$ 3,177	\$ 3,179
	11 Accumulated Tax Depreciation										\$ 253,686	\$ 256,863	\$ 260,043
	12 Tax/Book Depreciation Difference										\$ 252,747	\$ 1,298	\$ 1,300
	13 Accumulated Tax/Book Depreciation Difference										\$ 252,747	\$ 254,044	\$ 255,344
	14 Income Tax Rate											41.37%	41.37%
	15 Deferred Income Tax Expense - debit (credit)										\$ 104,561	\$ 537	\$ 538
	16 Excess Deferred Income Tax												
	17 Excess Deferred Income Tax Amortization												
	18 Accumulated Deferred Income Tax										\$ 104,561	\$ 105,098	\$ 105,636
	19 Adjusted Accumulated Deferred Income Tax												
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit										\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant										\$ 540,724	\$ 538,787	\$ 536,852
	2 Less Accumulated Deferred Income Tax Liability										\$ 104,561	\$ 105,098	\$ 105,636
	3 Rate Base										\$ 436,162	\$ 433,689	\$ 431,216
	4 Average Rate Base										\$ 218,081	\$ 434,926	\$ 432,453
	5 Current Return on CWIP	\$ -	\$ 63	\$ 153	\$ 250	\$ 462	\$ 1,105	\$ 2,039	\$ 3,744	\$ 5,243	\$ 2,739	\$ -	\$ -
	6 After Tax Return on Equity										\$ 1,024	\$ 2,042	\$ 2,030
	7 Income Tax Component										\$ 723	\$ 1,441	\$ 1,433
	8 Interest Expense Component										\$ 462	\$ 921	\$ 915
	9 Total Return on Average Rate Base										\$ 2,208	\$ 4,404	\$ 4,379
	10 Depreciation Expense										\$ 1,016	\$ 2,032	\$ 2,032
	11 Property Tax												
	12 Investment Tax Credit										\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ -	\$ 63	\$ 153	\$ 250	\$ 462	\$ 1,105	\$ 2,039	\$ 3,744	\$ 5,243	\$ 5,963	\$ 6,435	\$ 6,411

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Project 107804 Revenue Requirements

107804 - In Service 10/14/2016

Section	Line	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
A	Book Basis of Property												
	1 CWIP												
	2 Plant in Service	\$ 541,932	\$ 542,208	\$ 542,208	\$ 542,208	\$ 542,208	\$ 597,462	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790
	3 Accumulated Depreciation	\$ 7,112	\$ 9,145	\$ 11,178	\$ 13,211	\$ 15,244	\$ 17,381	\$ 19,622	\$ 21,864	\$ 24,106	\$ 26,347	\$ 28,589	\$ 30,831
	4 Net Plant	\$ 534,820	\$ 533,063	\$ 531,030	\$ 528,997	\$ 526,964	\$ 580,081	\$ 578,167	\$ 575,926	\$ 573,684	\$ 571,442	\$ 569,201	\$ 566,959
	5 Book Depreciation Rate	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%
B	Tax Basis of Property												
	1 Investment Tax Credit	\$ -	\$ 41	\$ -	\$ -	\$ -	\$ 8,288	\$ 49	\$ -	\$ -	\$ -	\$ -	\$ -
	2 Reduction to Book and Tax Basis	\$ -	\$ 21	\$ -	\$ -	\$ -	\$ 4,144	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -
	3 Adjusted Book and Tax Basis for Deferred Taxes	\$ -	\$ 256	\$ -	\$ -	\$ -	\$ 51,110	\$ 303	\$ -	\$ -	\$ -	\$ -	\$ -
	4 Bonus Depreciation	\$ -	\$ 128	\$ -	\$ -	\$ -	\$ 25,555	\$ 151	\$ -	\$ -	\$ -	\$ -	\$ -
	5 Net Depreciable Plant	\$ 250,643	\$ 250,771	\$ 250,771	\$ 250,771	\$ 250,771	\$ 276,326	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478
	6 Book Depreciation Rate	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%
	7 Book Style Depreciation for Deferred Taxes	\$ 1,880	\$ 1,880	\$ 1,881	\$ 1,881	\$ 1,881	\$ 1,977	\$ 2,073	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074
	8 Accumulated Book Depreciation	\$ 6,578	\$ 8,459	\$ 10,339	\$ 12,220	\$ 14,101	\$ 16,078	\$ 18,151	\$ 20,224	\$ 22,298	\$ 24,371	\$ 26,445	\$ 28,519
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation	\$ 1,508	\$ 1,636	\$ 1,508	\$ 1,508	\$ 1,508	\$ 27,200	\$ 1,797	\$ 1,646	\$ 1,646	\$ 1,646	\$ 1,646	\$ 1,646
	11 Accumulated Tax Depreciation	\$ 261,550	\$ 263,186	\$ 264,695	\$ 266,203	\$ 267,711	\$ 294,911	\$ 296,709	\$ 298,355	\$ 300,001	\$ 301,647	\$ 303,293	\$ 304,939
	12 Tax/Book Depreciation Difference	\$ (372)	\$ (244)	\$ (373)	\$ (373)	\$ (373)	\$ 25,224	\$ (276)	\$ (428)	\$ (428)	\$ (428)	\$ (428)	\$ (428)
	13 Accumulated Tax/Book Depreciation Difference	\$ 254,972	\$ 254,728	\$ 254,355	\$ 253,983	\$ 253,610	\$ 278,834	\$ 278,558	\$ 278,131	\$ 277,703	\$ 277,275	\$ 276,848	\$ 276,420
	14 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
	15 Deferred Income Tax Expense - debit (credit)	\$ (154)	\$ (101)	\$ (154)	\$ (154)	\$ (154)	\$ 10,435	\$ (114)	\$ (177)	\$ (177)	\$ (177)	\$ (177)	\$ (177)
	16 Excess Deferred Income Tax												\$ 34,906
	17 Excess Deferred Income Tax Amortization												
	18 Accumulated Deferred Income Tax	\$ 105,482	\$ 105,381	\$ 105,227	\$ 105,073	\$ 104,919	\$ 115,354	\$ 115,240	\$ 115,063	\$ 114,886	\$ 114,709	\$ 114,532	\$ 79,449
	19 Adjusted Accumulated Deferred Income Tax												\$ 114,355
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant	\$ 534,820	\$ 533,063	\$ 531,030	\$ 528,997	\$ 526,964	\$ 580,081	\$ 578,167	\$ 575,926	\$ 573,684	\$ 571,442	\$ 569,201	\$ 566,959
	2 Less Accumulated Deferred Income Tax Liability	\$ 105,482	\$ 105,381	\$ 105,227	\$ 105,073	\$ 104,919	\$ 115,354	\$ 115,240	\$ 115,063	\$ 114,886	\$ 114,709	\$ 114,532	\$ 114,355
	3 Rate Base	\$ 429,338	\$ 427,683	\$ 425,803	\$ 423,924	\$ 422,045	\$ 464,727	\$ 462,928	\$ 460,863	\$ 458,798	\$ 456,733	\$ 454,669	\$ 452,604
	4 Average Rate Base	\$ 430,277	\$ 428,510	\$ 426,743	\$ 424,864	\$ 422,985	\$ 443,386	\$ 463,828	\$ 461,895	\$ 459,831	\$ 457,766	\$ 455,701	\$ 453,636
	5 Current Return on CWIP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	6 After Tax Return on Equity	\$ 1,785	\$ 1,777	\$ 1,770	\$ 1,762	\$ 1,755	\$ 1,839	\$ 1,924	\$ 1,916	\$ 1,907	\$ 1,899	\$ 1,890	\$ 1,882
	7 Income Tax Component	\$ 1,259	\$ 1,254	\$ 1,249	\$ 1,243	\$ 1,238	\$ 1,298	\$ 1,358	\$ 1,352	\$ 1,346	\$ 1,340	\$ 1,334	\$ 1,328
	8 Interest Expense Component	\$ 748	\$ 745	\$ 742	\$ 739	\$ 735	\$ 771	\$ 806	\$ 803	\$ 799	\$ 796	\$ 792	\$ 789
	9 Total Return on Average Rate Base	\$ 3,792	\$ 3,777	\$ 3,761	\$ 3,744	\$ 3,728	\$ 3,908	\$ 4,088	\$ 4,071	\$ 4,053	\$ 4,034	\$ 4,016	\$ 3,998
	10 Depreciation Expense	\$ 2,032	\$ 2,033	\$ 2,033	\$ 2,033	\$ 2,033	\$ 2,137	\$ 2,241	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242
	11 Property Tax	\$ 1,049	\$ 1,049	\$ 1,049	\$ 1,049	\$ 1,049	\$ 1,049	\$ 1,049	\$ 1,049	\$ 1,049	\$ 1,049	\$ 1,049	\$ 1,049
	12 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ 6,874	\$ 6,859	\$ 6,844	\$ 6,827	\$ 6,810	\$ 7,094	\$ 7,378	\$ 7,362	\$ 7,344	\$ 7,325	\$ 7,307	\$ 7,289

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Project 107804 Revenue Requirements

107804 - In Service 10/14/2016

Section	Line	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
A	Book Basis of Property												
	1 CWIP												
	2 Plant in Service	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790
	3 Accumulated Depreciation	\$ 33,073	\$ 35,314	\$ 37,556	\$ 39,798	\$ 42,039	\$ 44,281	\$ 46,523	\$ 48,765	\$ 51,006	\$ 53,248	\$ 55,490	\$ 57,731
	4 Net Plant	\$ 564,717	\$ 562,475	\$ 560,234	\$ 557,992	\$ 555,750	\$ 553,509	\$ 551,267	\$ 549,025	\$ 546,783	\$ 544,542	\$ 542,300	\$ 540,058
	5 Book Depreciation Rate	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%
B	Tax Basis of Property												
	1 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2 Reduction to Book and Tax Basis	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3 Adjusted Book and Tax Basis for Deferred Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	4 Bonus Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	5 Net Depreciable Plant	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478
	6 Book Depreciation Rate	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%
	7 Book Style Depreciation for Deferred Taxes	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074
	8 Accumulated Book Depreciation	\$ 30,592	\$ 32,666	\$ 34,739	\$ 36,813	\$ 38,887	\$ 40,960	\$ 43,034	\$ 45,107	\$ 47,181	\$ 49,254	\$ 51,328	\$ 53,402
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation	\$ 1,550	\$ 1,550	\$ 1,550	\$ 1,550	\$ 1,550	\$ 1,550	\$ 1,550	\$ 1,550	\$ 1,550	\$ 1,550	\$ 1,550	\$ 1,550
	11 Accumulated Tax Depreciation	\$ 306,489	\$ 308,039	\$ 309,589	\$ 311,139	\$ 312,689	\$ 314,239	\$ 315,789	\$ 317,339	\$ 318,889	\$ 320,439	\$ 321,989	\$ 323,539
	12 Tax/Book Depreciation Difference	\$ (524)	\$ (524)	\$ (524)	\$ (524)	\$ (524)	\$ (524)	\$ (524)	\$ (524)	\$ (524)	\$ (524)	\$ (524)	\$ (524)
	13 Accumulated Tax/Book Depreciation Difference	\$ 275,897	\$ 275,373	\$ 274,850	\$ 274,326	\$ 273,802	\$ 273,279	\$ 272,755	\$ 272,232	\$ 271,708	\$ 271,185	\$ 270,661	\$ 270,138
	14 Income Tax Rate	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%
	15 Deferred Income Tax Expense - debit (credit)	\$ (150)	\$ (150)	\$ (150)	\$ (150)	\$ (150)	\$ (150)	\$ (150)	\$ (150)	\$ (150)	\$ (150)	\$ (150)	\$ (150)
	16 Excess Deferred Income Tax	\$ 34,906	\$ 34,833	\$ 34,759	\$ 34,686	\$ 34,612	\$ 34,539	\$ 34,465	\$ 34,392	\$ 34,318	\$ 34,245	\$ 34,171	\$ 34,098
	17 Excess Deferred Income Tax Amortization	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73
	18 Accumulated Deferred Income Tax	\$ 79,298	\$ 79,148	\$ 78,997	\$ 78,847	\$ 78,696	\$ 78,546	\$ 78,395	\$ 78,245	\$ 78,094	\$ 77,944	\$ 77,793	\$ 77,643
	19 Adjusted Accumulated Deferred Income Tax	\$ 114,131	\$ 113,907	\$ 113,683	\$ 113,459	\$ 113,235	\$ 113,011	\$ 112,787	\$ 112,563	\$ 112,339	\$ 112,115	\$ 111,891	\$ 111,667
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant	\$ 564,717	\$ 562,475	\$ 560,234	\$ 557,992	\$ 555,750	\$ 553,509	\$ 551,267	\$ 549,025	\$ 546,783	\$ 544,542	\$ 542,300	\$ 540,058
	2 Less Accumulated Deferred Income Tax Liability	\$ 114,131	\$ 113,907	\$ 113,683	\$ 113,459	\$ 113,235	\$ 113,011	\$ 112,787	\$ 112,563	\$ 112,339	\$ 112,115	\$ 111,891	\$ 111,667
	3 Rate Base	\$ 450,586	\$ 448,568	\$ 446,551	\$ 444,533	\$ 442,515	\$ 440,497	\$ 438,480	\$ 436,462	\$ 434,444	\$ 432,426	\$ 430,409	\$ 428,391
	4 Average Rate Base	\$ 451,595	\$ 449,577	\$ 447,559	\$ 445,542	\$ 443,524	\$ 441,506	\$ 439,488	\$ 437,471	\$ 435,453	\$ 433,435	\$ 431,417	\$ 429,400
	5 Current Return on CWIP												
	6 After Tax Return on Equity	\$ 1,873	\$ 1,865	\$ 1,856	\$ 1,848	\$ 1,840	\$ 1,831	\$ 1,823	\$ 1,815	\$ 1,806	\$ 1,798	\$ 1,789	\$ 1,781
	7 Income Tax Component	\$ 756	\$ 752	\$ 749	\$ 745	\$ 742	\$ 739	\$ 735	\$ 732	\$ 729	\$ 725	\$ 722	\$ 718
	8 Interest Expense Component	\$ 785	\$ 782	\$ 778	\$ 775	\$ 771	\$ 768	\$ 764	\$ 761	\$ 757	\$ 754	\$ 750	\$ 747
	9 Total Return on Average Rate Base	\$ 3,414	\$ 3,399	\$ 3,383	\$ 3,368	\$ 3,353	\$ 3,338	\$ 3,322	\$ 3,307	\$ 3,292	\$ 3,277	\$ 3,261	\$ 3,246
	10 Depreciation Expense	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242
	11 Property Tax	\$ 1,015	\$ 1,015	\$ 1,015	\$ 1,015	\$ 1,015	\$ 1,015	\$ 1,015	\$ 1,015	\$ 1,015	\$ 1,015	\$ 1,015	\$ 1,015
	12 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ 6,671	\$ 6,656	\$ 6,641	\$ 6,625	\$ 6,610	\$ 6,595	\$ 6,580	\$ 6,564	\$ 6,549	\$ 6,534	\$ 6,518	\$ 6,503

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Project 107804 Revenue Requirements

107804 - In Service 10/14/2016

Section	Line	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
A	Book Basis of Property												
	1 CWIP												
	2 Plant in Service	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790
	3 Accumulated Depreciation	\$ 59,973	\$ 62,215	\$ 64,457	\$ 66,698	\$ 68,940	\$ 71,182	\$ 73,423	\$ 75,665	\$ 77,907	\$ 80,149	\$ 82,390	\$ 84,632
	4 Net Plant	\$ 537,817	\$ 535,575	\$ 533,333	\$ 531,091	\$ 528,850	\$ 526,608	\$ 524,366	\$ 522,125	\$ 519,883	\$ 517,641	\$ 515,399	\$ 513,158
	5 Book Depreciation Rate	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%
B	Tax Basis of Property												
	1 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2 Reduction to Book and Tax Basis	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3 Adjusted Book and Tax Basis for Deferred Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	4 Bonus Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	5 Net Depreciable Plant	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478
	6 Book Depreciation Rate	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%
	7 Book Style Depreciation for Deferred Taxes	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074
	8 Accumulated Book Depreciation	\$ 55,475	\$ 57,549	\$ 59,622	\$ 61,696	\$ 63,770	\$ 65,843	\$ 67,917	\$ 69,990	\$ 72,064	\$ 74,137	\$ 76,211	\$ 78,285
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation	\$ 1,434	\$ 1,434	\$ 1,434	\$ 1,434	\$ 1,434	\$ 1,434	\$ 1,434	\$ 1,434	\$ 1,434	\$ 1,434	\$ 1,434	\$ 1,434
	11 Accumulated Tax Depreciation	\$ 324,973	\$ 326,407	\$ 327,841	\$ 329,275	\$ 330,709	\$ 332,143	\$ 333,577	\$ 335,011	\$ 336,445	\$ 337,879	\$ 339,313	\$ 340,746
	12 Tax/Book Depreciation Difference	\$ (640)	\$ (640)	\$ (640)	\$ (640)	\$ (640)	\$ (640)	\$ (640)	\$ (640)	\$ (640)	\$ (640)	\$ (640)	\$ (640)
	13 Accumulated Tax/Book Depreciation Difference	\$ 269,498	\$ 268,858	\$ 268,219	\$ 267,579	\$ 266,939	\$ 266,300	\$ 265,660	\$ 265,020	\$ 264,381	\$ 263,741	\$ 263,102	\$ 262,462
	14 Income Tax Rate	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%
	15 Deferred Income Tax Expense - debit (credit)	\$ (184)	\$ (184)	\$ (184)	\$ (184)	\$ (184)	\$ (184)	\$ (184)	\$ (184)	\$ (184)	\$ (184)	\$ (184)	\$ (184)
	16 Excess Deferred Income Tax	\$ 34,024	\$ 33,951	\$ 33,878	\$ 33,804	\$ 33,731	\$ 33,657	\$ 33,584	\$ 33,510	\$ 33,437	\$ 33,363	\$ 33,290	\$ 33,216
	17 Excess Deferred Income Tax Amortization	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73
	18 Accumulated Deferred Income Tax	\$ 77,459	\$ 77,275	\$ 77,091	\$ 76,908	\$ 76,724	\$ 76,540	\$ 76,356	\$ 76,172	\$ 75,988	\$ 75,804	\$ 75,621	\$ 75,437
	19 Adjusted Accumulated Deferred Income Tax	\$ 111,410	\$ 111,153	\$ 110,895	\$ 110,638	\$ 110,381	\$ 110,123	\$ 109,866	\$ 109,609	\$ 109,351	\$ 109,094	\$ 108,837	\$ 108,579
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant	\$ 537,817	\$ 535,575	\$ 533,333	\$ 531,091	\$ 528,850	\$ 526,608	\$ 524,366	\$ 522,125	\$ 519,883	\$ 517,641	\$ 515,399	\$ 513,158
	2 Less Accumulated Deferred Income Tax Liability	\$ 111,410	\$ 111,153	\$ 110,895	\$ 110,638	\$ 110,381	\$ 110,123	\$ 109,866	\$ 109,609	\$ 109,351	\$ 109,094	\$ 108,837	\$ 108,579
	3 Rate Base	\$ 426,406	\$ 424,422	\$ 422,438	\$ 420,453	\$ 418,469	\$ 416,485	\$ 414,500	\$ 412,516	\$ 410,531	\$ 408,547	\$ 406,563	\$ 404,578
	4 Average Rate Base	\$ 427,399	\$ 425,414	\$ 423,430	\$ 421,445	\$ 419,461	\$ 417,477	\$ 415,492	\$ 413,508	\$ 411,524	\$ 409,539	\$ 407,555	\$ 405,570
	5 Current Return on CWIP												
	6 After Tax Return on Equity	\$ 1,773	\$ 1,765	\$ 1,756	\$ 1,748	\$ 1,740	\$ 1,732	\$ 1,723	\$ 1,715	\$ 1,707	\$ 1,699	\$ 1,690	\$ 1,682
	7 Income Tax Component	\$ 715	\$ 712	\$ 708	\$ 705	\$ 702	\$ 698	\$ 695	\$ 692	\$ 689	\$ 685	\$ 682	\$ 679
	8 Interest Expense Component	\$ 743	\$ 740	\$ 736	\$ 733	\$ 729	\$ 726	\$ 722	\$ 719	\$ 716	\$ 712	\$ 709	\$ 705
	9 Total Return on Average Rate Base	\$ 3,231	\$ 3,216	\$ 3,201	\$ 3,186	\$ 3,171	\$ 3,156	\$ 3,141	\$ 3,126	\$ 3,111	\$ 3,096	\$ 3,081	\$ 3,066
	10 Depreciation Expense	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242
	11 Property Tax	\$ 965	\$ 965	\$ 965	\$ 965	\$ 965	\$ 965	\$ 965	\$ 965	\$ 965	\$ 965	\$ 965	\$ 965
	12 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ 6,438	\$ 6,423	\$ 6,408	\$ 6,393	\$ 6,378	\$ 6,363	\$ 6,348	\$ 6,333	\$ 6,318	\$ 6,303	\$ 6,288	\$ 6,273

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Project 107804 Revenue Requirements

107804 - In Service 10/14/2016

Section	Line	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
A	Book Basis of Property												
	1 CWIP												
	2 Plant in Service	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790	\$ 597,790
	3 Accumulated Depreciation	\$ 86,874	\$ 89,115	\$ 91,357	\$ 93,599	\$ 95,841	\$ 98,082	\$ 100,324	\$ 102,566	\$ 104,807	\$ 107,049	\$ 109,291	\$ 111,533
	4 Net Plant	\$ 510,916	\$ 508,674	\$ 506,433	\$ 504,191	\$ 501,949	\$ 499,707	\$ 497,466	\$ 495,224	\$ 492,982	\$ 490,741	\$ 488,499	\$ 486,257
	5 Book Depreciation Rate	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%
B	Tax Basis of Property												
	1 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2 Reduction to Book and Tax Basis	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3 Adjusted Book and Tax Basis for Deferred Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	4 Bonus Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	5 Net Depreciable Plant	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478	\$ 276,478
	6 Book Depreciation Rate	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%	0.375%
	7 Book Style Depreciation for Deferred Taxes	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074	\$ 2,074
	8 Accumulated Book Depreciation	\$ 80,358	\$ 82,432	\$ 84,505	\$ 86,579	\$ 88,652	\$ 90,726	\$ 92,800	\$ 94,873	\$ 96,947	\$ 99,020	\$ 101,094	\$ 103,168
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation	\$ 1,326	\$ 1,326	\$ 1,326	\$ 1,326	\$ 1,326	\$ 1,326	\$ 1,326	\$ 1,326	\$ 1,326	\$ 1,326	\$ 1,326	\$ 1,326
	11 Accumulated Tax Depreciation	\$ 342,073	\$ 343,399	\$ 344,725	\$ 346,051	\$ 347,378	\$ 348,704	\$ 350,030	\$ 351,356	\$ 352,683	\$ 354,009	\$ 355,335	\$ 356,661
	12 Tax/Book Depreciation Difference	\$ (747)	\$ (747)	\$ (747)	\$ (747)	\$ (747)	\$ (747)	\$ (747)	\$ (747)	\$ (747)	\$ (747)	\$ (747)	\$ (747)
	13 Accumulated Tax/Book Depreciation Difference	\$ 261,715	\$ 260,967	\$ 260,220	\$ 259,473	\$ 258,725	\$ 257,978	\$ 257,231	\$ 256,483	\$ 255,736	\$ 254,989	\$ 254,241	\$ 253,494
	14 Income Tax Rate	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%
	15 Deferred Income Tax Expense - debit (credit)	\$ (215)	\$ (215)	\$ (215)	\$ (215)	\$ (215)	\$ (215)	\$ (215)	\$ (215)	\$ (215)	\$ (215)	\$ (215)	\$ (215)
	16 Excess Deferred Income Tax	\$ 33,143	\$ 33,069	\$ 32,996	\$ 32,922	\$ 32,849	\$ 32,775	\$ 32,702	\$ 32,628	\$ 32,555	\$ 32,481	\$ 32,408	\$ 32,334
	17 Excess Deferred Income Tax Amortization	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73
	18 Accumulated Deferred Income Tax	\$ 75,222	\$ 75,007	\$ 74,792	\$ 74,578	\$ 74,363	\$ 74,148	\$ 73,933	\$ 73,718	\$ 73,504	\$ 73,289	\$ 73,074	\$ 72,859
	19 Adjusted Accumulated Deferred Income Tax	\$ 108,291	\$ 108,003	\$ 107,715	\$ 107,426	\$ 107,138	\$ 106,850	\$ 106,561	\$ 106,273	\$ 105,985	\$ 105,697	\$ 105,408	\$ 105,120
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant	\$ 510,916	\$ 508,674	\$ 506,433	\$ 504,191	\$ 501,949	\$ 499,707	\$ 497,466	\$ 495,224	\$ 492,982	\$ 490,741	\$ 488,499	\$ 486,257
	2 Less Accumulated Deferred Income Tax Liability	\$ 108,291	\$ 108,003	\$ 107,715	\$ 107,426	\$ 107,138	\$ 106,850	\$ 106,561	\$ 106,273	\$ 105,985	\$ 105,697	\$ 105,408	\$ 105,120
	3 Rate Base	\$ 402,625	\$ 400,671	\$ 398,718	\$ 396,765	\$ 394,811	\$ 392,858	\$ 390,904	\$ 388,951	\$ 386,997	\$ 385,044	\$ 383,091	\$ 381,137
	4 Average Rate Base	\$ 403,602	\$ 401,648	\$ 399,695	\$ 397,741	\$ 395,788	\$ 393,834	\$ 391,881	\$ 389,928	\$ 387,974	\$ 386,021	\$ 384,067	\$ 382,114
	5 Current Return on CWIP												
	6 After Tax Return on Equity	\$ 1,674	\$ 1,666	\$ 1,658	\$ 1,650	\$ 1,642	\$ 1,634	\$ 1,625	\$ 1,617	\$ 1,609	\$ 1,601	\$ 1,593	\$ 1,585
	7 Income Tax Component	\$ 675	\$ 672	\$ 669	\$ 665	\$ 662	\$ 659	\$ 656	\$ 652	\$ 649	\$ 646	\$ 643	\$ 639
	8 Interest Expense Component	\$ 702	\$ 698	\$ 695	\$ 692	\$ 688	\$ 685	\$ 681	\$ 678	\$ 675	\$ 671	\$ 668	\$ 664
	9 Total Return on Average Rate Base	\$ 3,051	\$ 3,036	\$ 3,022	\$ 3,007	\$ 2,992	\$ 2,977	\$ 2,962	\$ 2,948	\$ 2,933	\$ 2,918	\$ 2,903	\$ 2,889
	10 Depreciation Expense	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242	\$ 2,242
	11 Property Tax	\$ 966	\$ 966	\$ 966	\$ 966	\$ 966	\$ 966	\$ 966	\$ 966	\$ 966	\$ 966	\$ 966	\$ 966
	12 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ 6,259	\$ 6,244	\$ 6,229	\$ 6,215	\$ 6,200	\$ 6,185	\$ 6,170	\$ 6,156	\$ 6,141	\$ 6,126	\$ 6,111	\$ 6,096

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Project 107805 Revenue Requirements

107805 - In Service 9/23/2016

Section	Line	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
A	Book Basis of Property												
	1 CWIP	\$ 39,901	\$ 39,902	\$ 39,902	\$ 39,902	\$ 39,902	\$ 39,904	\$ 39,909	\$ 39,914				
	2 Plant in Service									\$ 43,048	\$ 57,793	\$ 72,764	\$ 73,748
	3 Accumulated Depreciation									\$ 45	\$ 150	\$ 286	\$ 438
	4 Net Plant									\$ 43,003	\$ 57,643	\$ 72,479	\$ 73,309
	5 Book Depreciation Rate									0.208%	0.208%	0.208%	0.208%
	6 Total Depreciation									\$ 45	\$ 105	\$ 136	\$ 153
B	Tax Basis of Property												
	1 Investment Tax Credit									\$ 12,914	\$ 4,424	\$ 4,491	\$ 295
	2 Reduction to Book and Tax Basis									\$ 6,457	\$ 2,212	\$ 2,246	\$ 147
	3 Adjusted Book and Tax Basis for Deferred Taxes									\$ 36,591	\$ 12,533	\$ 12,726	\$ 836
	4 Bonus Depreciation									\$ 18,295	\$ 6,267	\$ 6,363	\$ 418
	5 Net Depreciable Plant									\$ 18,295	\$ 24,562	\$ 30,925	\$ 31,343
	6 Book Depreciation Rate									0.208%	0.208%	0.208%	0.208%
	7 Book Style Depreciation for Deferred Taxes									\$ 38	\$ 89	\$ 116	\$ 130
	8 Accumulated Book Depreciation									\$ 38	\$ 127	\$ 243	\$ 373
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation									\$ 18,524	\$ 6,600	\$ 6,855	\$ 931
	11 Accumulated Tax Depreciation									\$ 18,524	\$ 25,124	\$ 31,979	\$ 32,910
	12 Tax/Book Depreciation Difference									\$ 18,486	\$ 6,511	\$ 6,739	\$ 801
	13 Accumulated Tax/Book Depreciation Difference									\$ 18,486	\$ 24,997	\$ 31,736	\$ 32,537
	14 Income Tax Rate									41.37%	41.37%	41.37%	41.37%
	15 Deferred Income Tax Expense - debit (credit)									\$ 7,648	\$ 2,693	\$ 2,788	\$ 331
	16 Excess Deferred Income Tax												
	17 Excess Deferred Income Tax Amortization												
	18 Accumulated Deferred Income Tax									\$ 7,648	\$ 10,341	\$ 13,129	\$ 13,461
	19 Adjusted Accumulated Deferred Income Tax												
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit									\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant									\$ 43,003	\$ 57,643	\$ 72,479	\$ 73,309
	2 Less Accumulated Deferred Income Tax Liability									\$ 7,648	\$ 10,341	\$ 13,129	\$ 13,461
	3 Rate Base									\$ 35,356	\$ 47,302	\$ 59,349	\$ 59,849
	4 Average Rate Base									\$ 17,678	\$ 41,329	\$ 53,326	\$ 59,599
	5 Current Return on CWIP	\$ -	\$ 404	\$ 404	\$ 404	\$ 404	\$ 404	\$ 404	\$ 404	\$ 210	\$ -	\$ -	\$ -
	6 After Tax Return on Equity									\$ 83	\$ 194	\$ 250	\$ 280
	7 Income Tax Component									\$ 59	\$ 137	\$ 177	\$ 197
	8 Interest Expense Component									\$ 37	\$ 87	\$ 113	\$ 126
	9 Total Return on Average Rate Base									\$ 179	\$ 418	\$ 540	\$ 603
	10 Depreciation Expense									\$ 45	\$ 105	\$ 136	\$ 153
	11 Property Tax												
	12 Investment Tax Credit									\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ -	\$ 404	\$ 404	\$ 404	\$ 404	\$ 404	\$ 404	\$ 404	\$ 434	\$ 523	\$ 676	\$ 756

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Project 107805 Revenue Requirements

107805 - In Service 9/23/2016

Section	Line	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
A	Book Basis of Property												
	1 CWIP												
	2 Plant in Service	\$ 73,748	\$ 75,505	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510
	3 Accumulated Depreciation	\$ 592	\$ 748	\$ 905	\$ 1,062	\$ 1,220	\$ 1,377	\$ 1,534	\$ 1,691	\$ 1,849	\$ 2,006	\$ 2,163	\$ 2,321
	4 Net Plant	\$ 73,156	\$ 74,758	\$ 74,601	\$ 74,443	\$ 74,286	\$ 74,129	\$ 73,971	\$ 73,814	\$ 73,657	\$ 73,499	\$ 73,342	\$ 73,185
	5 Book Depreciation Rate	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%
	6 Total Depreciation	\$ 154	\$ 155	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157
B	Tax Basis of Property												
	1 Investment Tax Credit	\$ -	\$ 527	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2 Reduction to Book and Tax Basis	\$ -	\$ 264	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3 Adjusted Book and Tax Basis for Deferred Taxes	\$ -	\$ 1,494	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	4 Bonus Depreciation	\$ -	\$ 747	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	5 Net Depreciable Plant	\$ 31,343	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090
	6 Book Depreciation Rate	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%
	7 Book Style Depreciation for Deferred Taxes	\$ 131	\$ 132	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134
	8 Accumulated Book Depreciation	\$ 503	\$ 635	\$ 769	\$ 903	\$ 1,037	\$ 1,170	\$ 1,304	\$ 1,438	\$ 1,571	\$ 1,705	\$ 1,839	\$ 1,973
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation	\$ 248	\$ 999	\$ 252	\$ 252	\$ 252	\$ 252	\$ 252	\$ 252	\$ 252	\$ 252	\$ 252	\$ 252
	11 Accumulated Tax Depreciation	\$ 33,158	\$ 34,157	\$ 34,408	\$ 34,660	\$ 34,911	\$ 35,163	\$ 35,414	\$ 35,666	\$ 35,917	\$ 36,169	\$ 36,420	\$ 36,672
	12 Tax/Book Depreciation Difference	\$ 118	\$ 866	\$ 118	\$ 118	\$ 118	\$ 118	\$ 118	\$ 118	\$ 118	\$ 118	\$ 118	\$ 118
	13 Accumulated Tax/Book Depreciation Difference	\$ 32,655	\$ 33,521	\$ 33,639	\$ 33,757	\$ 33,875	\$ 33,992	\$ 34,110	\$ 34,228	\$ 34,346	\$ 34,464	\$ 34,582	\$ 34,699
	14 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
	15 Deferred Income Tax Expense - debit (credit)	\$ 49	\$ 358	\$ 49	\$ 49	\$ 49	\$ 49	\$ 49	\$ 49	\$ 49	\$ 49	\$ 49	\$ 49
	16 Excess Deferred Income Tax												\$ 4,382
	17 Excess Deferred Income Tax Amortization												
	18 Accumulated Deferred Income Tax	\$ 13,509	\$ 13,868	\$ 13,916	\$ 13,965	\$ 14,014	\$ 14,063	\$ 14,111	\$ 14,160	\$ 14,209	\$ 14,258	\$ 14,306	\$ 9,973
	19 Adjusted Accumulated Deferred Income Tax												\$ 14,355
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant	\$ 73,156	\$ 74,758	\$ 74,601	\$ 74,443	\$ 74,286	\$ 74,129	\$ 73,971	\$ 73,814	\$ 73,657	\$ 73,499	\$ 73,342	\$ 73,185
	2 Less Accumulated Deferred Income Tax Liability	\$ 13,509	\$ 13,868	\$ 13,916	\$ 13,965	\$ 14,014	\$ 14,063	\$ 14,111	\$ 14,160	\$ 14,209	\$ 14,258	\$ 14,306	\$ 14,355
	3 Rate Base	\$ 59,646	\$ 60,890	\$ 60,684	\$ 60,478	\$ 60,272	\$ 60,066	\$ 59,860	\$ 59,654	\$ 59,448	\$ 59,242	\$ 59,036	\$ 58,830
	4 Average Rate Base	\$ 59,747	\$ 60,268	\$ 60,787	\$ 60,581	\$ 60,375	\$ 60,169	\$ 59,963	\$ 59,757	\$ 59,551	\$ 59,345	\$ 59,139	\$ 58,933
	5 Current Return on CWIP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	6 After Tax Return on Equity	\$ 248	\$ 250	\$ 252	\$ 251	\$ 250	\$ 250	\$ 249	\$ 248	\$ 247	\$ 246	\$ 245	\$ 244
	7 Income Tax Component	\$ 175	\$ 176	\$ 178	\$ 177	\$ 177	\$ 176	\$ 176	\$ 175	\$ 174	\$ 174	\$ 173	\$ 172
	8 Interest Expense Component	\$ 104	\$ 105	\$ 106	\$ 105	\$ 105	\$ 105	\$ 104	\$ 104	\$ 104	\$ 103	\$ 103	\$ 102
	9 Total Return on Average Rate Base	\$ 527	\$ 531	\$ 536	\$ 534	\$ 532	\$ 530	\$ 528	\$ 527	\$ 525	\$ 523	\$ 521	\$ 519
	10 Depreciation Expense	\$ 154	\$ 155	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157
	11 Property Tax	\$ 376	\$ 376	\$ 376	\$ 376	\$ 376	\$ 376	\$ 376	\$ 376	\$ 376	\$ 376	\$ 376	\$ 376
	12 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ 1,057	\$ 1,063	\$ 1,069	\$ 1,068	\$ 1,066	\$ 1,064	\$ 1,062	\$ 1,060	\$ 1,058	\$ 1,057	\$ 1,055	\$ 1,053

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Project 107805 Revenue Requirements

107805 - In Service 9/23/2016

Section	Line	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
A	Book Basis of Property												
	1 CWIP												
	2 Plant in Service	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510
	3 Accumulated Depreciation	\$ 2,478	\$ 2,635	\$ 2,793	\$ 2,950	\$ 3,107	\$ 3,264	\$ 3,422	\$ 3,579	\$ 3,736	\$ 3,894	\$ 4,051	\$ 4,208
	4 Net Plant	\$ 73,028	\$ 72,870	\$ 72,713	\$ 72,556	\$ 72,398	\$ 72,241	\$ 72,084	\$ 71,926	\$ 71,769	\$ 71,612	\$ 71,454	\$ 71,297
	5 Book Depreciation Rate	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%
	6 Total Depreciation	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157
B	Tax Basis of Property												
	1 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2 Reduction to Book and Tax Basis	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3 Adjusted Book and Tax Basis for Deferred Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	4 Bonus Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	5 Net Depreciable Plant	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090
	6 Book Depreciation Rate	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%
	7 Book Style Depreciation for Deferred Taxes	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134
	8 Accumulated Book Depreciation	\$ 2,106	\$ 2,240	\$ 2,374	\$ 2,507	\$ 2,641	\$ 2,775	\$ 2,908	\$ 3,042	\$ 3,176	\$ 3,310	\$ 3,443	\$ 3,577
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation	\$ 229	\$ 229	\$ 229	\$ 229	\$ 229	\$ 229	\$ 229	\$ 229	\$ 229	\$ 229	\$ 229	\$ 229
	11 Accumulated Tax Depreciation	\$ 36,901	\$ 37,130	\$ 37,360	\$ 37,589	\$ 37,818	\$ 38,047	\$ 38,276	\$ 38,506	\$ 38,735	\$ 38,964	\$ 39,193	\$ 39,423
	12 Tax/Book Depreciation Difference	\$ 96	\$ 96	\$ 96	\$ 96	\$ 96	\$ 96	\$ 96	\$ 96	\$ 96	\$ 96	\$ 96	\$ 96
	13 Accumulated Tax/Book Depreciation Difference	\$ 34,795	\$ 34,890	\$ 34,986	\$ 35,081	\$ 35,177	\$ 35,272	\$ 35,368	\$ 35,464	\$ 35,559	\$ 35,655	\$ 35,750	\$ 35,846
	14 Income Tax Rate	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%
	15 Deferred Income Tax Expense - debit (credit)	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27
	16 Excess Deferred Income Tax	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382
	17 Excess Deferred Income Tax Amortization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	18 Accumulated Deferred Income Tax	\$ 10,001	\$ 10,028	\$ 10,056	\$ 10,083	\$ 10,111	\$ 10,138	\$ 10,165	\$ 10,193	\$ 10,220	\$ 10,248	\$ 10,275	\$ 10,303
	19 Adjusted Accumulated Deferred Income Tax	\$ 14,383	\$ 14,410	\$ 14,437	\$ 14,465	\$ 14,492	\$ 14,520	\$ 14,547	\$ 14,575	\$ 14,602	\$ 14,630	\$ 14,657	\$ 14,685
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant	\$ 73,028	\$ 72,870	\$ 72,713	\$ 72,556	\$ 72,398	\$ 72,241	\$ 72,084	\$ 71,926	\$ 71,769	\$ 71,612	\$ 71,454	\$ 71,297
	2 Less Accumulated Deferred Income Tax Liability	\$ 14,383	\$ 14,410	\$ 14,437	\$ 14,465	\$ 14,492	\$ 14,520	\$ 14,547	\$ 14,575	\$ 14,602	\$ 14,630	\$ 14,657	\$ 14,685
	3 Rate Base	\$ 58,645	\$ 58,460	\$ 58,275	\$ 58,091	\$ 57,906	\$ 57,721	\$ 57,536	\$ 57,352	\$ 57,167	\$ 56,982	\$ 56,797	\$ 56,613
	4 Average Rate Base	\$ 58,737	\$ 58,553	\$ 58,368	\$ 58,183	\$ 57,998	\$ 57,814	\$ 57,629	\$ 57,444	\$ 57,259	\$ 57,074	\$ 56,890	\$ 56,705
	5 Current Return on CWIP												
	6 After Tax Return on Equity	\$ 244	\$ 243	\$ 242	\$ 241	\$ 241	\$ 240	\$ 239	\$ 238	\$ 238	\$ 237	\$ 236	\$ 235
	7 Income Tax Component	\$ 98	\$ 98	\$ 98	\$ 97	\$ 97	\$ 97	\$ 96	\$ 96	\$ 96	\$ 95	\$ 95	\$ 95
	8 Interest Expense Component	\$ 102	\$ 102	\$ 101	\$ 101	\$ 101	\$ 101	\$ 100	\$ 100	\$ 100	\$ 99	\$ 99	\$ 99
	9 Total Return on Average Rate Base	\$ 444	\$ 443	\$ 441	\$ 440	\$ 438	\$ 437	\$ 436	\$ 434	\$ 433	\$ 431	\$ 430	\$ 429
	10 Depreciation Expense	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157
	11 Property Tax	\$ 364	\$ 364	\$ 364	\$ 364	\$ 364	\$ 364	\$ 364	\$ 364	\$ 364	\$ 364	\$ 364	\$ 364
	12 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ 966	\$ 964	\$ 963	\$ 961	\$ 960	\$ 959	\$ 957	\$ 956	\$ 954	\$ 953	\$ 952	\$ 950

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Project 107805 Revenue Requirements

107805 - In Service 9/23/2016

Section	Line	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
A	Book Basis of Property												
	1 CWIP												
	2 Plant in Service	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510
	3 Accumulated Depreciation	\$ 4,366	\$ 4,523	\$ 4,680	\$ 4,837	\$ 4,995	\$ 5,152	\$ 5,309	\$ 5,467	\$ 5,624	\$ 5,781	\$ 5,939	\$ 6,096
	4 Net Plant	\$ 71,140	\$ 70,983	\$ 70,825	\$ 70,668	\$ 70,511	\$ 70,353	\$ 70,196	\$ 70,039	\$ 69,881	\$ 69,724	\$ 69,567	\$ 69,410
	5 Book Depreciation Rate	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%
	6 Total Depreciation	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157
B	Tax Basis of Property												
	1 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2 Reduction to Book and Tax Basis	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3 Adjusted Book and Tax Basis for Deferred Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	4 Bonus Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	5 Net Depreciable Plant	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090
	6 Book Depreciation Rate	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%
	7 Book Style Depreciation for Deferred Taxes	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134
	8 Accumulated Book Depreciation	\$ 3,711	\$ 3,844	\$ 3,978	\$ 4,112	\$ 4,246	\$ 4,379	\$ 4,513	\$ 4,647	\$ 4,780	\$ 4,914	\$ 5,048	\$ 5,182
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206
	11 Accumulated Tax Depreciation	\$ 39,629	\$ 39,836	\$ 40,042	\$ 40,248	\$ 40,455	\$ 40,661	\$ 40,868	\$ 41,074	\$ 41,281	\$ 41,487	\$ 41,693	\$ 41,900
	12 Tax/Book Depreciation Difference	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73
	13 Accumulated Tax/Book Depreciation Difference	\$ 35,918	\$ 35,991	\$ 36,064	\$ 36,137	\$ 36,209	\$ 36,282	\$ 36,355	\$ 36,427	\$ 36,500	\$ 36,573	\$ 36,646	\$ 36,718
	14 Income Tax Rate	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%
	15 Deferred Income Tax Expense - debit (credit)	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21
	16 Excess Deferred Income Tax	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382
	17 Excess Deferred Income Tax Amortization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	18 Accumulated Deferred Income Tax	\$ 10,324	\$ 10,345	\$ 10,365	\$ 10,386	\$ 10,407	\$ 10,428	\$ 10,449	\$ 10,470	\$ 10,491	\$ 10,512	\$ 10,533	\$ 10,554
	19 Adjusted Accumulated Deferred Income Tax	\$ 14,705	\$ 14,726	\$ 14,747	\$ 14,768	\$ 14,789	\$ 14,810	\$ 14,831	\$ 14,852	\$ 14,873	\$ 14,894	\$ 14,915	\$ 14,935
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant	\$ 71,140	\$ 70,983	\$ 70,825	\$ 70,668	\$ 70,511	\$ 70,353	\$ 70,196	\$ 70,039	\$ 69,881	\$ 69,724	\$ 69,567	\$ 69,410
	2 Less Accumulated Deferred Income Tax Liability	\$ 14,705	\$ 14,726	\$ 14,747	\$ 14,768	\$ 14,789	\$ 14,810	\$ 14,831	\$ 14,852	\$ 14,873	\$ 14,894	\$ 14,915	\$ 14,935
	3 Rate Base	\$ 56,434	\$ 56,256	\$ 56,078	\$ 55,900	\$ 55,722	\$ 55,543	\$ 55,365	\$ 55,187	\$ 55,009	\$ 54,831	\$ 54,652	\$ 54,474
	4 Average Rate Base	\$ 56,523	\$ 56,345	\$ 56,167	\$ 55,989	\$ 55,811	\$ 55,632	\$ 55,454	\$ 55,276	\$ 55,098	\$ 54,920	\$ 54,741	\$ 54,563
	5 Current Return on CWIP												
	6 After Tax Return on Equity	\$ 234	\$ 234	\$ 233	\$ 232	\$ 231	\$ 231	\$ 230	\$ 229	\$ 229	\$ 228	\$ 227	\$ 226
	7 Income Tax Component	\$ 95	\$ 94	\$ 94	\$ 94	\$ 93	\$ 93	\$ 93	\$ 92	\$ 92	\$ 92	\$ 92	\$ 91
	8 Interest Expense Component	\$ 98	\$ 98	\$ 98	\$ 97	\$ 97	\$ 97	\$ 96	\$ 96	\$ 96	\$ 95	\$ 95	\$ 95
	9 Total Return on Average Rate Base	\$ 427	\$ 426	\$ 425	\$ 423	\$ 422	\$ 421	\$ 419	\$ 418	\$ 417	\$ 415	\$ 414	\$ 412
	10 Depreciation Expense	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157
	11 Property Tax	\$ 346	\$ 346	\$ 346	\$ 346	\$ 346	\$ 346	\$ 346	\$ 346	\$ 346	\$ 346	\$ 346	\$ 346
	12 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ 931	\$ 929	\$ 928	\$ 927	\$ 925	\$ 924	\$ 923	\$ 921	\$ 920	\$ 919	\$ 917	\$ 916

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Project 107805 Revenue Requirements

107805 - In Service 9/23/2016

Section	Line	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
A	Book Basis of Property												
	1 CWIP												
	2 Plant in Service	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510	\$ 75,510
	3 Accumulated Depreciation	\$ 6,253	\$ 6,411	\$ 6,568	\$ 6,725	\$ 6,882	\$ 7,040	\$ 7,197	\$ 7,354	\$ 7,512	\$ 7,669	\$ 7,826	\$ 7,984
	4 Net Plant	\$ 69,252	\$ 69,095	\$ 68,938	\$ 68,780	\$ 68,623	\$ 68,466	\$ 68,308	\$ 68,151	\$ 67,994	\$ 67,837	\$ 67,679	\$ 67,522
	5 Book Depreciation Rate	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%
	6 Total Depreciation	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157
B	Tax Basis of Property												
	1 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2 Reduction to Book and Tax Basis	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3 Adjusted Book and Tax Basis for Deferred Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	4 Bonus Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	5 Net Depreciable Plant	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090	\$ 32,090
	6 Book Depreciation Rate	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%	0.208%
	7 Book Style Depreciation for Deferred Taxes	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134	\$ 134
	8 Accumulated Book Depreciation	\$ 5,315	\$ 5,449	\$ 5,583	\$ 5,716	\$ 5,850	\$ 5,984	\$ 6,117	\$ 6,251	\$ 6,385	\$ 6,519	\$ 6,652	\$ 6,786
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation	\$ 186	\$ 186	\$ 186	\$ 186	\$ 186	\$ 186	\$ 186	\$ 186	\$ 186	\$ 186	\$ 186	\$ 186
	11 Accumulated Tax Depreciation	\$ 42,086	\$ 42,272	\$ 42,457	\$ 42,643	\$ 42,829	\$ 43,015	\$ 43,201	\$ 43,386	\$ 43,572	\$ 43,758	\$ 43,944	\$ 44,129
	12 Tax/Book Depreciation Difference	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52
	13 Accumulated Tax/Book Depreciation Difference	\$ 36,770	\$ 36,823	\$ 36,875	\$ 36,927	\$ 36,979	\$ 37,031	\$ 37,083	\$ 37,135	\$ 37,187	\$ 37,239	\$ 37,291	\$ 37,343
	14 Income Tax Rate	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%
	15 Deferred Income Tax Expense - debit (credit)	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15
	16 Excess Deferred Income Tax	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382	\$ 4,382
	17 Excess Deferred Income Tax Amortization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	18 Accumulated Deferred Income Tax	\$ 10,569	\$ 10,584	\$ 10,599	\$ 10,613	\$ 10,628	\$ 10,643	\$ 10,658	\$ 10,673	\$ 10,688	\$ 10,703	\$ 10,718	\$ 10,733
	19 Adjusted Accumulated Deferred Income Tax	\$ 14,950	\$ 14,965	\$ 14,980	\$ 14,995	\$ 15,010	\$ 15,025	\$ 15,040	\$ 15,055	\$ 15,070	\$ 15,085	\$ 15,100	\$ 15,115
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant	\$ 69,252	\$ 69,095	\$ 68,938	\$ 68,780	\$ 68,623	\$ 68,466	\$ 68,308	\$ 68,151	\$ 67,994	\$ 67,837	\$ 67,679	\$ 67,522
	2 Less Accumulated Deferred Income Tax Liability	\$ 14,950	\$ 14,965	\$ 14,980	\$ 14,995	\$ 15,010	\$ 15,025	\$ 15,040	\$ 15,055	\$ 15,070	\$ 15,085	\$ 15,100	\$ 15,115
	3 Rate Base	\$ 54,302	\$ 54,130	\$ 53,957	\$ 53,785	\$ 53,613	\$ 53,440	\$ 53,268	\$ 53,096	\$ 52,924	\$ 52,751	\$ 52,579	\$ 52,407
	4 Average Rate Base	\$ 54,388	\$ 54,216	\$ 54,043	\$ 53,871	\$ 53,699	\$ 53,527	\$ 53,354	\$ 53,182	\$ 53,010	\$ 52,837	\$ 52,665	\$ 52,493
	5 Current Return on CWIP												
	6 After Tax Return on Equity	\$ 226	\$ 225	\$ 224	\$ 223	\$ 223	\$ 222	\$ 221	\$ 221	\$ 220	\$ 219	\$ 218	\$ 218
	7 Income Tax Component	\$ 91	\$ 91	\$ 90	\$ 90	\$ 90	\$ 90	\$ 89	\$ 89	\$ 89	\$ 88	\$ 88	\$ 88
	8 Interest Expense Component	\$ 95	\$ 94	\$ 94	\$ 94	\$ 93	\$ 93	\$ 93	\$ 92	\$ 92	\$ 92	\$ 92	\$ 91
	9 Total Return on Average Rate Base	\$ 411	\$ 410	\$ 409	\$ 407	\$ 406	\$ 405	\$ 403	\$ 402	\$ 401	\$ 399	\$ 398	\$ 397
	10 Depreciation Expense	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157	\$ 157
	11 Property Tax	\$ 347	\$ 347	\$ 347	\$ 347	\$ 347	\$ 347	\$ 347	\$ 347	\$ 347	\$ 347	\$ 347	\$ 347
	12 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ 915	\$ 914	\$ 912	\$ 911	\$ 910	\$ 908	\$ 907	\$ 906	\$ 905	\$ 903	\$ 902	\$ 901

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Project 107806 Revenue Requirements

107806 - In Service 11/23/2016

Section	Line	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
A	Book Basis of Property												
	1 CWIP	\$ 16	\$ 1,030	\$ 1,445	\$ 6,925	\$ 11,019	\$ 18,964	\$ 24,375	\$ 28,694	\$ 34,557	\$ 35,099		
	2 Plant in Service											\$ 35,099	\$ 35,244
	3 Accumulated Depreciation											\$ 40	\$ 121
	4 Net Plant											\$ 35,059	\$ 35,122
	5 Book Depreciation Rate											0.230%	0.230%
	6 Total Depreciation											\$ 40	\$ 81
B	Tax Basis of Property												
	1 Investment Tax Credit											\$ 10,530	\$ 43
	2 Reduction to Book and Tax Basis											\$ 5,265	\$ 22
	3 Adjusted Book and Tax Basis for Deferred Taxes											\$ 29,834	\$ 123
	4 Bonus Depreciation											\$ 14,917	\$ 61
	5 Net Depreciable Plant											\$ 14,917	\$ 14,979
	6 Book Depreciation Rate											0.230%	0.230%
	7 Book Style Depreciation for Deferred Taxes											\$ 34	\$ 69
	8 Accumulated Book Depreciation											\$ 34	\$ 103
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation											\$ 15,290	\$ 437
	11 Accumulated Tax Depreciation											\$ 15,290	\$ 15,727
	12 Tax/Book Depreciation Difference											\$ 15,256	\$ 369
	13 Accumulated Tax/Book Depreciation Difference											\$ 15,256	\$ 15,624
	14 Income Tax Rate											41.37%	41.37%
	15 Deferred Income Tax Expense - debit (credit)											\$ 6,311	\$ 153
	16 Excess Deferred Income Tax												
	17 Excess Deferred Income Tax Amortization												
	18 Accumulated Deferred Income Tax											\$ 6,311	\$ 6,464
	19 Adjusted Accumulated Deferred Income Tax												
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit											\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant											\$ 35,059	\$ 35,122
	2 Less Accumulated Deferred Income Tax Liability											\$ 6,311	\$ 6,464
	3 Rate Base											\$ 28,747	\$ 28,659
	4 Average Rate Base											\$ 14,374	\$ 28,703
	5 Current Return on CWIP	\$ -	\$ 5	\$ 13	\$ 42	\$ 91	\$ 152	\$ 219	\$ 269	\$ 320	\$ 353	\$ 178	\$ -
	6 After Tax Return on Equity											\$ 67	\$ 135
	7 Income Tax Component											\$ 48	\$ 95
	8 Interest Expense Component											\$ 30	\$ 61
	9 Total Return on Average Rate Base											\$ 146	\$ 291
	10 Depreciation Expense											\$ 40	\$ 81
	11 Property Tax												
	12 Investment Tax Credit											\$ -	\$ -
	13 Revenue Requirements	\$ -	\$ 5	\$ 13	\$ 42	\$ 91	\$ 152	\$ 219	\$ 269	\$ 320	\$ 353	\$ 364	\$ 372

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Project 107806 Revenue Requirements

107806 - In Service 11/23/2016

Section	Line	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
A	Book Basis of Property												
	1 CWIP												
	2 Plant in Service	\$ 35,675	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821
	3 Accumulated Depreciation	\$ 203	\$ 285	\$ 367	\$ 450	\$ 532	\$ 615	\$ 697	\$ 779	\$ 862	\$ 944	\$ 1,027	\$ 1,109
	4 Net Plant	\$ 35,472	\$ 35,536	\$ 35,454	\$ 35,371	\$ 35,289	\$ 35,207	\$ 35,124	\$ 35,042	\$ 34,959	\$ 34,877	\$ 34,795	\$ 34,712
	5 Book Depreciation Rate	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%
	6 Total Depreciation	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82
B	Tax Basis of Property												
	1 Investment Tax Credit	\$ 129	\$ 44	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2 Reduction to Book and Tax Basis	\$ 65	\$ 22	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3 Adjusted Book and Tax Basis for Deferred Taxes	\$ 366	\$ 125	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	4 Bonus Depreciation	\$ 183	\$ 62	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	5 Net Depreciable Plant	\$ 15,162	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224
	6 Book Depreciation Rate	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%
	7 Book Style Depreciation for Deferred Taxes	\$ 69	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70
	8 Accumulated Book Depreciation	\$ 172	\$ 242	\$ 312	\$ 382	\$ 452	\$ 522	\$ 592	\$ 662	\$ 732	\$ 802	\$ 872	\$ 942
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation	\$ 303	\$ 182	\$ 120	\$ 120	\$ 120	\$ 120	\$ 120	\$ 120	\$ 120	\$ 120	\$ 120	\$ 120
	11 Accumulated Tax Depreciation	\$ 16,030	\$ 16,212	\$ 16,332	\$ 16,451	\$ 16,571	\$ 16,690	\$ 16,810	\$ 16,930	\$ 17,049	\$ 17,169	\$ 17,289	\$ 17,408
	12 Tax/Book Depreciation Difference	\$ 233	\$ 112	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50
	13 Accumulated Tax/Book Depreciation Difference	\$ 15,858	\$ 15,970	\$ 16,020	\$ 16,069	\$ 16,119	\$ 16,168	\$ 16,218	\$ 16,268	\$ 16,317	\$ 16,367	\$ 16,416	\$ 16,466
	14 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
	15 Deferred Income Tax Expense - debit (credit)	\$ 96	\$ 46	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21
	16 Excess Deferred Income Tax												\$ 2,079
	17 Excess Deferred Income Tax Amortization												
	18 Accumulated Deferred Income Tax	\$ 6,560	\$ 6,607	\$ 6,627	\$ 6,648	\$ 6,668	\$ 6,689	\$ 6,709	\$ 6,730	\$ 6,750	\$ 6,771	\$ 6,791	\$ 4,733
	19 Adjusted Accumulated Deferred Income Tax												\$ 6,812
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant	\$ 35,472	\$ 35,536	\$ 35,454	\$ 35,371	\$ 35,289	\$ 35,207	\$ 35,124	\$ 35,042	\$ 34,959	\$ 34,877	\$ 34,795	\$ 34,712
	2 Less Accumulated Deferred Income Tax Liability	\$ 6,560	\$ 6,607	\$ 6,627	\$ 6,648	\$ 6,668	\$ 6,689	\$ 6,709	\$ 6,730	\$ 6,750	\$ 6,771	\$ 6,791	\$ 6,812
	3 Rate Base	\$ 28,912	\$ 28,929	\$ 28,826	\$ 28,724	\$ 28,621	\$ 28,518	\$ 28,415	\$ 28,312	\$ 28,209	\$ 28,106	\$ 28,003	\$ 27,900
	4 Average Rate Base	\$ 28,785	\$ 28,921	\$ 28,878	\$ 28,775	\$ 28,672	\$ 28,569	\$ 28,466	\$ 28,363	\$ 28,260	\$ 28,158	\$ 28,055	\$ 27,952
	5 Current Return on CWIP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	6 After Tax Return on Equity	\$ 119	\$ 120	\$ 120	\$ 119	\$ 119	\$ 119	\$ 118	\$ 118	\$ 117	\$ 117	\$ 116	\$ 116
	7 Income Tax Component	\$ 84	\$ 85	\$ 85	\$ 84	\$ 84	\$ 84	\$ 83	\$ 83	\$ 83	\$ 82	\$ 82	\$ 82
	8 Interest Expense Component	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 49	\$ 49	\$ 49	\$ 49	\$ 49	\$ 49
	9 Total Return on Average Rate Base	\$ 254	\$ 255	\$ 255	\$ 254	\$ 253	\$ 252	\$ 251	\$ 250	\$ 249	\$ 248	\$ 247	\$ 246
	10 Depreciation Expense	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82
	11 Property Tax	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206	\$ 206
	12 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ 542	\$ 543	\$ 543	\$ 542	\$ 541	\$ 541	\$ 540	\$ 539	\$ 538	\$ 537	\$ 536	\$ 535

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Project 107806 Revenue Requirements

107806 - In Service 11/23/2016

Section	Line	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
A	Book Basis of Property												
	1 CWIP												
	2 Plant in Service	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821
	3 Accumulated Depreciation	\$ 1,191	\$ 1,274	\$ 1,356	\$ 1,438	\$ 1,521	\$ 1,603	\$ 1,686	\$ 1,768	\$ 1,850	\$ 1,933	\$ 2,015	\$ 2,098
	4 Net Plant	\$ 34,630	\$ 34,547	\$ 34,465	\$ 34,383	\$ 34,300	\$ 34,218	\$ 34,136	\$ 34,053	\$ 33,971	\$ 33,888	\$ 33,806	\$ 33,724
	5 Book Depreciation Rate	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%
	6 Total Depreciation	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82
B	Tax Basis of Property												
	1 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2 Reduction to Book and Tax Basis	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3 Adjusted Book and Tax Basis for Deferred Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	4 Bonus Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	5 Net Depreciable Plant	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224
	6 Book Depreciation Rate	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%
	7 Book Style Depreciation for Deferred Taxes	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70
	8 Accumulated Book Depreciation	\$ 1,012	\$ 1,082	\$ 1,152	\$ 1,222	\$ 1,292	\$ 1,362	\$ 1,432	\$ 1,502	\$ 1,572	\$ 1,642	\$ 1,712	\$ 1,783
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109
	11 Accumulated Tax Depreciation	\$ 17,517	\$ 17,625	\$ 17,734	\$ 17,843	\$ 17,951	\$ 18,060	\$ 18,169	\$ 18,277	\$ 18,386	\$ 18,495	\$ 18,603	\$ 18,712
	12 Tax/Book Depreciation Difference	\$ 39	\$ 39	\$ 39	\$ 39	\$ 39	\$ 39	\$ 39	\$ 39	\$ 39	\$ 39	\$ 39	\$ 39
	13 Accumulated Tax/Book Depreciation Difference	\$ 16,505	\$ 16,543	\$ 16,582	\$ 16,621	\$ 16,659	\$ 16,698	\$ 16,736	\$ 16,775	\$ 16,814	\$ 16,852	\$ 16,891	\$ 16,930
	14 Income Tax Rate	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%
	15 Deferred Income Tax Expense - debit (credit)	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11
	16 Excess Deferred Income Tax	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079
	17 Excess Deferred Income Tax Amortization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	18 Accumulated Deferred Income Tax	\$ 4,744	\$ 4,755	\$ 4,766	\$ 4,777	\$ 4,788	\$ 4,799	\$ 4,810	\$ 4,821	\$ 4,833	\$ 4,844	\$ 4,855	\$ 4,866
	19 Adjusted Accumulated Deferred Income Tax	\$ 6,823	\$ 6,834	\$ 6,845	\$ 6,856	\$ 6,868	\$ 6,879	\$ 6,890	\$ 6,901	\$ 6,912	\$ 6,923	\$ 6,934	\$ 6,945
	20 Amortization of Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	21 Gross-up of Amortized Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant	\$ 34,630	\$ 34,547	\$ 34,465	\$ 34,383	\$ 34,300	\$ 34,218	\$ 34,136	\$ 34,053	\$ 33,971	\$ 33,888	\$ 33,806	\$ 33,724
	2 Less Accumulated Deferred Income Tax Liability	\$ 6,823	\$ 6,834	\$ 6,845	\$ 6,856	\$ 6,868	\$ 6,879	\$ 6,890	\$ 6,901	\$ 6,912	\$ 6,923	\$ 6,934	\$ 6,945
	3 Rate Base	\$ 27,807	\$ 27,713	\$ 27,620	\$ 27,526	\$ 27,433	\$ 27,339	\$ 27,246	\$ 27,152	\$ 27,059	\$ 26,965	\$ 26,872	\$ 26,778
	4 Average Rate Base	\$ 27,854	\$ 27,760	\$ 27,667	\$ 27,573	\$ 27,480	\$ 27,386	\$ 27,293	\$ 27,199	\$ 27,106	\$ 27,012	\$ 26,919	\$ 26,825
	5 Current Return on CWIP												
	6 After Tax Return on Equity	\$ 116	\$ 115	\$ 115	\$ 114	\$ 114	\$ 114	\$ 113	\$ 113	\$ 112	\$ 112	\$ 112	\$ 111
	7 Income Tax Component	\$ 47	\$ 46	\$ 46	\$ 46	\$ 46	\$ 46	\$ 46	\$ 46	\$ 45	\$ 45	\$ 45	\$ 45
	8 Interest Expense Component	\$ 48	\$ 48	\$ 48	\$ 48	\$ 48	\$ 48	\$ 47	\$ 47	\$ 47	\$ 47	\$ 47	\$ 47
	9 Total Return on Average Rate Base	\$ 211	\$ 210	\$ 209	\$ 208	\$ 208	\$ 207	\$ 206	\$ 206	\$ 205	\$ 204	\$ 203	\$ 203
	10 Depreciation Expense	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82
	11 Property Tax	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200
	12 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ 493	\$ 492	\$ 491	\$ 491	\$ 490	\$ 489	\$ 488	\$ 488	\$ 487	\$ 486	\$ 486	\$ 485

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Project 107806 Revenue Requirements

107806 - In Service 11/23/2016

Section	Line	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
A	Book Basis of Property												
	1 CWIP												
	2 Plant in Service	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821
	3 Accumulated Depreciation	\$ 2,180	\$ 2,262	\$ 2,345	\$ 2,427	\$ 2,510	\$ 2,592	\$ 2,674	\$ 2,757	\$ 2,839	\$ 2,921	\$ 3,004	\$ 3,086
	4 Net Plant	\$ 33,641	\$ 33,559	\$ 33,476	\$ 33,394	\$ 33,312	\$ 33,229	\$ 33,147	\$ 33,064	\$ 32,982	\$ 32,900	\$ 32,817	\$ 32,735
	5 Book Depreciation Rate	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%
	6 Total Depreciation	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82
B	Tax Basis of Property												
	1 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2 Reduction to Book and Tax Basis	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3 Adjusted Book and Tax Basis for Deferred Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	4 Bonus Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	5 Net Depreciable Plant	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224
	6 Book Depreciation Rate	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%
	7 Book Style Depreciation for Deferred Taxes	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70
	8 Accumulated Book Depreciation	\$ 1,853	\$ 1,923	\$ 1,993	\$ 2,063	\$ 2,133	\$ 2,203	\$ 2,273	\$ 2,343	\$ 2,413	\$ 2,483	\$ 2,553	\$ 2,623
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation	\$ 98	\$ 98	\$ 98	\$ 98	\$ 98	\$ 98	\$ 98	\$ 98	\$ 98	\$ 98	\$ 98	\$ 98
	11 Accumulated Tax Depreciation	\$ 18,810	\$ 18,908	\$ 19,006	\$ 19,104	\$ 19,201	\$ 19,299	\$ 19,397	\$ 19,495	\$ 19,593	\$ 19,691	\$ 19,789	\$ 19,886
	12 Tax/Book Depreciation Difference	\$ 28	\$ 28	\$ 28	\$ 28	\$ 28	\$ 28	\$ 28	\$ 28	\$ 28	\$ 28	\$ 28	\$ 28
	13 Accumulated Tax/Book Depreciation Difference	\$ 16,957	\$ 16,985	\$ 17,013	\$ 17,041	\$ 17,069	\$ 17,097	\$ 17,124	\$ 17,152	\$ 17,180	\$ 17,208	\$ 17,236	\$ 17,264
	14 Income Tax Rate	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%
	15 Deferred Income Tax Expense - debit (credit)	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8
	16 Excess Deferred Income Tax	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079
	17 Excess Deferred Income Tax Amortization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	18 Accumulated Deferred Income Tax	\$ 4,874	\$ 4,882	\$ 4,890	\$ 4,898	\$ 4,906	\$ 4,914	\$ 4,922	\$ 4,930	\$ 4,938	\$ 4,946	\$ 4,954	\$ 4,962
	19 Adjusted Accumulated Deferred Income Tax	\$ 6,953	\$ 6,961	\$ 6,969	\$ 6,977	\$ 6,985	\$ 6,993	\$ 7,001	\$ 7,009	\$ 7,017	\$ 7,025	\$ 7,033	\$ 7,041
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant	\$ 33,641	\$ 33,559	\$ 33,476	\$ 33,394	\$ 33,312	\$ 33,229	\$ 33,147	\$ 33,064	\$ 32,982	\$ 32,900	\$ 32,817	\$ 32,735
	2 Less Accumulated Deferred Income Tax Liability	\$ 6,953	\$ 6,961	\$ 6,969	\$ 6,977	\$ 6,985	\$ 6,993	\$ 7,001	\$ 7,009	\$ 7,017	\$ 7,025	\$ 7,033	\$ 7,041
	3 Rate Base	\$ 26,688	\$ 26,598	\$ 26,507	\$ 26,417	\$ 26,326	\$ 26,236	\$ 26,146	\$ 26,055	\$ 25,965	\$ 25,874	\$ 25,784	\$ 25,694
	4 Average Rate Base	\$ 26,733	\$ 26,643	\$ 26,552	\$ 26,462	\$ 26,372	\$ 26,281	\$ 26,191	\$ 26,100	\$ 26,010	\$ 25,920	\$ 25,829	\$ 25,739
	5 Current Return on CWIP												
	6 After Tax Return on Equity	\$ 111	\$ 111	\$ 110	\$ 110	\$ 109	\$ 109	\$ 109	\$ 108	\$ 108	\$ 108	\$ 107	\$ 107
	7 Income Tax Component	\$ 45	\$ 45	\$ 44	\$ 44	\$ 44	\$ 44	\$ 44	\$ 44	\$ 44	\$ 43	\$ 43	\$ 43
	8 Interest Expense Component	\$ 46	\$ 46	\$ 46	\$ 46	\$ 46	\$ 46	\$ 46	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45
	9 Total Return on Average Rate Base	\$ 202	\$ 201	\$ 201	\$ 200	\$ 199	\$ 199	\$ 198	\$ 197	\$ 197	\$ 196	\$ 195	\$ 195
	10 Depreciation Expense	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82
	11 Property Tax	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190
	12 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ 474	\$ 474	\$ 473	\$ 472	\$ 472	\$ 471	\$ 470	\$ 470	\$ 469	\$ 468	\$ 467	\$ 467

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Project 107806 Revenue Requirements

107806 - In Service 11/23/2016

Section	Line	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
A	Book Basis of Property												
	1 CWIP												
	2 Plant in Service	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821	\$ 35,821
	3 Accumulated Depreciation	\$ 3,169	\$ 3,251	\$ 3,333	\$ 3,416	\$ 3,498	\$ 3,581	\$ 3,663	\$ 3,745	\$ 3,828	\$ 3,910	\$ 3,993	\$ 4,075
	4 Net Plant	\$ 32,653	\$ 32,570	\$ 32,488	\$ 32,405	\$ 32,323	\$ 32,241	\$ 32,158	\$ 32,076	\$ 31,993	\$ 31,911	\$ 31,829	\$ 31,746
	5 Book Depreciation Rate	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%
	6 Total Depreciation	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82
B	Tax Basis of Property												
	1 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2 Reduction to Book and Tax Basis	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3 Adjusted Book and Tax Basis for Deferred Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	4 Bonus Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	5 Net Depreciable Plant	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224	\$ 15,224
	6 Book Depreciation Rate	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%	0.230%
	7 Book Style Depreciation for Deferred Taxes	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70
	8 Accumulated Book Depreciation	\$ 2,693	\$ 2,763	\$ 2,833	\$ 2,903	\$ 2,973	\$ 3,043	\$ 3,113	\$ 3,183	\$ 3,253	\$ 3,323	\$ 3,393	\$ 3,463
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation	\$ 88	\$ 88	\$ 88	\$ 88	\$ 88	\$ 88	\$ 88	\$ 88	\$ 88	\$ 88	\$ 88	\$ 88
	11 Accumulated Tax Depreciation	\$ 19,975	\$ 20,063	\$ 20,151	\$ 20,239	\$ 20,327	\$ 20,415	\$ 20,503	\$ 20,591	\$ 20,679	\$ 20,767	\$ 20,855	\$ 20,943
	12 Tax/Book Depreciation Difference	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18
	13 Accumulated Tax/Book Depreciation Difference	\$ 17,282	\$ 17,300	\$ 17,318	\$ 17,336	\$ 17,354	\$ 17,372	\$ 17,390	\$ 17,408	\$ 17,426	\$ 17,444	\$ 17,462	\$ 17,480
	14 Income Tax Rate	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%
	15 Deferred Income Tax Expense - debit (credit)	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
	16 Excess Deferred Income Tax	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079	\$ 2,079
	17 Excess Deferred Income Tax Amortization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	18 Accumulated Deferred Income Tax	\$ 4,967	\$ 4,972	\$ 4,977	\$ 4,983	\$ 4,988	\$ 4,993	\$ 4,998	\$ 5,003	\$ 5,009	\$ 5,014	\$ 5,019	\$ 5,024
	19 Adjusted Accumulated Deferred Income Tax	\$ 7,046	\$ 7,052	\$ 7,057	\$ 7,062	\$ 7,067	\$ 7,072	\$ 7,078	\$ 7,083	\$ 7,088	\$ 7,093	\$ 7,098	\$ 7,103
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant	\$ 32,653	\$ 32,570	\$ 32,488	\$ 32,405	\$ 32,323	\$ 32,241	\$ 32,158	\$ 32,076	\$ 31,993	\$ 31,911	\$ 31,829	\$ 31,746
	2 Less Accumulated Deferred Income Tax Liability	\$ 7,046	\$ 7,052	\$ 7,057	\$ 7,062	\$ 7,067	\$ 7,072	\$ 7,078	\$ 7,083	\$ 7,088	\$ 7,093	\$ 7,098	\$ 7,103
	3 Rate Base	\$ 25,606	\$ 25,519	\$ 25,431	\$ 25,343	\$ 25,256	\$ 25,168	\$ 25,081	\$ 24,993	\$ 24,906	\$ 24,818	\$ 24,730	\$ 24,643
	4 Average Rate Base	\$ 25,650	\$ 25,562	\$ 25,475	\$ 25,387	\$ 25,300	\$ 25,212	\$ 25,124	\$ 25,037	\$ 24,949	\$ 24,862	\$ 24,774	\$ 24,687
	5 Current Return on CWIP												
	6 After Tax Return on Equity	\$ 106	\$ 106	\$ 106	\$ 105	\$ 105	\$ 105	\$ 104	\$ 104	\$ 103	\$ 103	\$ 103	\$ 102
	7 Income Tax Component	\$ 43	\$ 43	\$ 43	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 41	\$ 41
	8 Interest Expense Component	\$ 45	\$ 44	\$ 44	\$ 44	\$ 44	\$ 44	\$ 44	\$ 44	\$ 43	\$ 43	\$ 43	\$ 43
	9 Total Return on Average Rate Base	\$ 194	\$ 193	\$ 193	\$ 192	\$ 191	\$ 191	\$ 190	\$ 189	\$ 189	\$ 188	\$ 187	\$ 187
	10 Depreciation Expense	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82	\$ 82
	11 Property Tax	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190
	12 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ 466	\$ 466	\$ 465	\$ 464	\$ 464	\$ 463	\$ 462	\$ 462	\$ 461	\$ 460	\$ 460	\$ 459

Minnesota Power
Renewable Resources Rider 2020 Factor Filing
Project 108533 Revenue Requirements

108533 - In Service 9/16/2016

Section	Line	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
A	Book Basis of Property												
	1 CWIP	\$ -	\$ -	\$ 23,226	\$ 34,721	\$ 47,748	\$ 52,929	\$ 54,054	\$ 115,007				
	2 Plant in Service									\$ 115,779	\$ 64,267	\$ 12,745	\$ 65,686
	3 Accumulated Depreciation									\$ 482	\$ 1,233	\$ 1,553	\$ 1,880
	4 Net Plant									\$ 115,297	\$ 63,034	\$ 11,192	\$ 63,806
	5 Book Depreciation Rate									0.833%	0.833%	0.833%	0.833%
	6 Total Depreciation									\$ 482	\$ 750	\$ 321	\$ 327
B	Tax Basis of Property												
	1 Investment Tax Credit									\$ 34,734	\$ (15,454)	\$ (15,456)	\$ 15,882
	2 Reduction to Book and Tax Basis									\$ 17,367	\$ (7,727)	\$ (7,728)	\$ 7,941
	3 Adjusted Book and Tax Basis for Deferred Taxes									\$ 98,413	\$ (43,786)	\$ (43,793)	\$ 45,000
	4 Bonus Depreciation									\$ 49,206	\$ (21,893)	\$ (21,897)	\$ 22,500
	5 Net Depreciable Plant									\$ 49,206	\$ 27,313	\$ 5,417	\$ 27,917
	6 Book Depreciation Rate									0.833%	0.833%	0.833%	0.833%
	7 Book Style Depreciation for Deferred Taxes									\$ 410	\$ 638	\$ 273	\$ 278
	8 Accumulated Book Depreciation									\$ 410	\$ 1,048	\$ 1,320	\$ 1,598
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation									\$ 50,964	\$ (21,178)	\$ (22,746)	\$ 24,866
	11 Accumulated Tax Depreciation									\$ 50,964	\$ 29,786	\$ 7,040	\$ 31,906
	12 Tax/Book Depreciation Difference									\$ 50,554	\$ (21,816)	\$ (23,019)	\$ 24,588
	13 Accumulated Tax/Book Depreciation Difference									\$ 50,554	\$ 28,739	\$ 5,720	\$ 30,308
	14 Income Tax Rate									41.37%	41.37%	41.37%	41.37%
	15 Deferred Income Tax Expense - debit (credit)									\$ 20,914	\$ (9,025)	\$ (9,523)	\$ 10,172
	16 Excess Deferred Income Tax												
	17 Excess Deferred Income Tax Amortization												
	18 Accumulated Deferred Income Tax									\$ 20,914	\$ 11,889	\$ 2,366	\$ 12,538
	19 Adjusted Accumulated Deferred Income Tax												
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit									\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant									\$ 115,297	\$ 63,034	\$ 11,192	\$ 63,806
	2 Less Accumulated Deferred Income Tax Liability									\$ 20,914	\$ 11,889	\$ 2,366	\$ 12,538
	3 Rate Base									\$ 94,383	\$ 51,145	\$ 8,825	\$ 51,268
	4 Average Rate Base									\$ 47,191	\$ 72,764	\$ 29,985	\$ 30,047
	5 Current Return on CWIP	\$ -	\$ -	\$ 118	\$ 293	\$ 417	\$ 510	\$ 542	\$ 856	\$ 584	\$ -	\$ -	\$ -
	6 After Tax Return on Equity									\$ 222	\$ 342	\$ 141	\$ 141
	7 Income Tax Component									\$ 156	\$ 241	\$ 99	\$ 100
	8 Interest Expense Component									\$ 100	\$ 154	\$ 63	\$ 64
	9 Total Return on Average Rate Base									\$ 478	\$ 737	\$ 304	\$ 304
	10 Depreciation Expense									\$ 482	\$ 750	\$ 321	\$ 327
	11 Property Tax									\$ -	\$ -	\$ -	\$ -
	12 Investment Tax Credit									\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ -	\$ -	\$ 118	\$ 293	\$ 417	\$ 510	\$ 542	\$ 856	\$ 1,544	\$ 1,487	\$ 624	\$ 631

Minnesota Power
Renewable Resources Rider 2020 Factor Filing
Project 108533 Revenue Requirements

108533 - In Service 9/16/2016

Section	Line	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
A	Book Basis of Property												
	1 CWIP												
	2 Plant in Service	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795
	3 Accumulated Depreciation	\$ 2,428	\$ 2,976	\$ 3,525	\$ 4,073	\$ 4,621	\$ 5,170	\$ 5,718	\$ 6,266	\$ 6,814	\$ 7,363	\$ 7,911	\$ 8,459
	4 Net Plant	\$ 63,366	\$ 62,818	\$ 62,270	\$ 61,722	\$ 61,173	\$ 60,625	\$ 60,077	\$ 59,528	\$ 58,980	\$ 58,432	\$ 57,884	\$ 57,335
	5 Book Depreciation Rate	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%
	6 Total Depreciation	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548
B	Tax Basis of Property												
	1 Investment Tax Credit	\$ 32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2 Reduction to Book and Tax Basis	\$ 16	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3 Adjusted Book and Tax Basis for Deferred Taxes	\$ 92	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	4 Bonus Depreciation	\$ 46	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	5 Net Depreciable Plant	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963
	6 Book Depreciation Rate	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%
	7 Book Style Depreciation for Deferred Taxes	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466
	8 Accumulated Book Depreciation	\$ 2,064	\$ 2,530	\$ 2,996	\$ 3,462	\$ 3,928	\$ 4,394	\$ 4,860	\$ 5,326	\$ 5,792	\$ 6,258	\$ 6,724	\$ 7,190
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation	\$ 616	\$ 570	\$ 570	\$ 570	\$ 570	\$ 570	\$ 570	\$ 570	\$ 570	\$ 570	\$ 570	\$ 570
	11 Accumulated Tax Depreciation	\$ 32,522	\$ 33,093	\$ 33,663	\$ 34,233	\$ 34,803	\$ 35,374	\$ 35,944	\$ 36,514	\$ 37,085	\$ 37,655	\$ 38,225	\$ 38,795
	12 Tax/Book Depreciation Difference	\$ 151	\$ 104	\$ 104	\$ 104	\$ 104	\$ 104	\$ 104	\$ 104	\$ 104	\$ 104	\$ 104	\$ 104
	13 Accumulated Tax/Book Depreciation Difference	\$ 30,458	\$ 30,563	\$ 30,667	\$ 30,771	\$ 30,875	\$ 30,980	\$ 31,084	\$ 31,188	\$ 31,292	\$ 31,397	\$ 31,501	\$ 31,605
	14 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
	15 Deferred Income Tax Expense - debit (credit)	\$ 62	\$ 43	\$ 43	\$ 43	\$ 43	\$ 43	\$ 43	\$ 43	\$ 43	\$ 43	\$ 43	\$ 43
	16 Excess Deferred Income Tax												\$ 3,991
	17 Excess Deferred Income Tax Amortization												
	18 Accumulated Deferred Income Tax	\$ 12,601	\$ 12,644	\$ 12,687	\$ 12,730	\$ 12,773	\$ 12,816	\$ 12,859	\$ 12,902	\$ 12,946	\$ 12,989	\$ 13,032	\$ 9,084
	19 Adjusted Accumulated Deferred Income Tax												\$ 13,075
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant	\$ 63,366	\$ 62,818	\$ 62,270	\$ 61,722	\$ 61,173	\$ 60,625	\$ 60,077	\$ 59,528	\$ 58,980	\$ 58,432	\$ 57,884	\$ 57,335
	2 Less Accumulated Deferred Income Tax Liability	\$ 12,601	\$ 12,644	\$ 12,687	\$ 12,730	\$ 12,773	\$ 12,816	\$ 12,859	\$ 12,902	\$ 12,946	\$ 12,989	\$ 13,032	\$ 13,075
	3 Rate Base	\$ 50,766	\$ 50,174	\$ 49,583	\$ 48,992	\$ 48,400	\$ 47,809	\$ 47,217	\$ 46,626	\$ 46,035	\$ 45,443	\$ 44,852	\$ 44,260
	4 Average Rate Base	\$ 51,017	\$ 50,470	\$ 49,879	\$ 49,287	\$ 48,696	\$ 48,105	\$ 47,513	\$ 46,922	\$ 46,330	\$ 45,739	\$ 45,147	\$ 44,556
	5 Current Return on CWIP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	6 After Tax Return on Equity	\$ 212	\$ 209	\$ 207	\$ 204	\$ 202	\$ 200	\$ 197	\$ 195	\$ 192	\$ 190	\$ 187	\$ 185
	7 Income Tax Component	\$ 149	\$ 148	\$ 146	\$ 144	\$ 143	\$ 141	\$ 139	\$ 137	\$ 136	\$ 134	\$ 132	\$ 130
	8 Interest Expense Component	\$ 89	\$ 88	\$ 87	\$ 86	\$ 85	\$ 84	\$ 83	\$ 82	\$ 81	\$ 80	\$ 78	\$ 77
	9 Total Return on Average Rate Base	\$ 450	\$ 445	\$ 440	\$ 434	\$ 429	\$ 424	\$ 419	\$ 414	\$ 408	\$ 403	\$ 398	\$ 393
	10 Depreciation Expense	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548
	11 Property Tax	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	12 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ 997	\$ 993	\$ 988	\$ 983	\$ 977	\$ 972	\$ 967	\$ 962	\$ 957	\$ 951	\$ 946	\$ 941

Minnesota Power
Renewable Resources Rider 2020 Factor Filing
Project 108533 Revenue Requirements

108533 - In Service 9/16/2016

Section	Line	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
A	Book Basis of Property												
	1 CWIP												
	2 Plant in Service	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795
	3 Accumulated Depreciation	\$ 9,008	\$ 9,556	\$ 10,104	\$ 10,652	\$ 11,201	\$ 11,749	\$ 12,297	\$ 12,846	\$ 13,394	\$ 13,942	\$ 14,490	\$ 15,039
	4 Net Plant	\$ 56,787	\$ 56,239	\$ 55,690	\$ 55,142	\$ 54,594	\$ 54,046	\$ 53,497	\$ 52,949	\$ 52,401	\$ 51,852	\$ 51,304	\$ 50,756
	5 Book Depreciation Rate	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%
	6 Total Depreciation	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548
B	Tax Basis of Property												
	1 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2 Reduction to Book and Tax Basis	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3 Adjusted Book and Tax Basis for Deferred Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	4 Bonus Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	5 Net Depreciable Plant	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963
	6 Book Depreciation Rate	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%
	7 Book Style Depreciation for Deferred Taxes	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466
	8 Accumulated Book Depreciation	\$ 7,656	\$ 8,122	\$ 8,589	\$ 9,055	\$ 9,521	\$ 9,987	\$ 10,453	\$ 10,919	\$ 11,385	\$ 11,851	\$ 12,317	\$ 12,783
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408
	11 Accumulated Tax Depreciation	\$ 39,203	\$ 39,611	\$ 40,019	\$ 40,427	\$ 40,835	\$ 41,242	\$ 41,650	\$ 42,058	\$ 42,466	\$ 42,874	\$ 43,281	\$ 43,689
	12 Tax/Book Depreciation Difference	\$ (58)	\$ (58)	\$ (58)	\$ (58)	\$ (58)	\$ (58)	\$ (58)	\$ (58)	\$ (58)	\$ (58)	\$ (58)	\$ (58)
	13 Accumulated Tax/Book Depreciation Difference	\$ 31,547	\$ 31,489	\$ 31,430	\$ 31,372	\$ 31,314	\$ 31,256	\$ 31,197	\$ 31,139	\$ 31,081	\$ 31,023	\$ 30,965	\$ 30,906
	14 Income Tax Rate	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%
	15 Deferred Income Tax Expense - debit (credit)	\$ (17)	\$ (17)	\$ (17)	\$ (17)	\$ (17)	\$ (17)	\$ (17)	\$ (17)	\$ (17)	\$ (17)	\$ (17)	\$ (17)
	16 Excess Deferred Income Tax	\$ 3,991	\$ 3,929	\$ 3,868	\$ 3,806	\$ 3,744	\$ 3,682	\$ 3,621	\$ 3,559	\$ 3,497	\$ 3,436	\$ 3,374	\$ 3,312
	17 Excess Deferred Income Tax Amortization	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62
	18 Accumulated Deferred Income Tax	\$ 9,067	\$ 9,050	\$ 9,034	\$ 9,017	\$ 9,000	\$ 8,984	\$ 8,967	\$ 8,950	\$ 8,933	\$ 8,917	\$ 8,900	\$ 8,883
	19 Adjusted Accumulated Deferred Income Tax	\$ 12,997	\$ 12,918	\$ 12,840	\$ 12,761	\$ 12,683	\$ 12,604	\$ 12,526	\$ 12,447	\$ 12,369	\$ 12,290	\$ 12,212	\$ 12,134
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant	\$ 56,787	\$ 56,239	\$ 55,690	\$ 55,142	\$ 54,594	\$ 54,046	\$ 53,497	\$ 52,949	\$ 52,401	\$ 51,852	\$ 51,304	\$ 50,756
	2 Less Accumulated Deferred Income Tax Liability	\$ 12,997	\$ 12,918	\$ 12,840	\$ 12,761	\$ 12,683	\$ 12,604	\$ 12,526	\$ 12,447	\$ 12,369	\$ 12,290	\$ 12,212	\$ 12,134
	3 Rate Base	\$ 43,791	\$ 43,321	\$ 42,851	\$ 42,381	\$ 41,911	\$ 41,441	\$ 40,972	\$ 40,502	\$ 40,032	\$ 39,562	\$ 39,092	\$ 38,622
	4 Average Rate Base	\$ 44,025	\$ 43,556	\$ 43,086	\$ 42,616	\$ 42,146	\$ 41,676	\$ 41,206	\$ 40,737	\$ 40,267	\$ 39,797	\$ 39,327	\$ 38,857
	5 Current Return on CWIP												
	6 After Tax Return on Equity	\$ 183	\$ 181	\$ 179	\$ 177	\$ 175	\$ 173	\$ 171	\$ 169	\$ 167	\$ 165	\$ 163	\$ 161
	7 Income Tax Component	\$ 74	\$ 73	\$ 72	\$ 71	\$ 71	\$ 70	\$ 69	\$ 68	\$ 67	\$ 67	\$ 66	\$ 65
	8 Interest Expense Component	\$ 77	\$ 76	\$ 75	\$ 74	\$ 73	\$ 72	\$ 72	\$ 71	\$ 70	\$ 69	\$ 68	\$ 68
	9 Total Return on Average Rate Base	\$ 333	\$ 329	\$ 326	\$ 322	\$ 319	\$ 315	\$ 312	\$ 308	\$ 304	\$ 301	\$ 297	\$ 294
	10 Depreciation Expense	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548
	11 Property Tax	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	12 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ 881	\$ 878	\$ 874	\$ 870	\$ 867	\$ 863	\$ 860	\$ 856	\$ 853	\$ 849	\$ 846	\$ 842

Minnesota Power
Renewable Resources Rider 2020 Factor Filing
Project 108533 Revenue Requirements

108533 - In Service 9/16/2016

Section	Line	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
A	Book Basis of Property												
	1 CWIP												
	2 Plant in Service	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795
	3 Accumulated Depreciation	\$ 15,587	\$ 16,135	\$ 16,684	\$ 17,232	\$ 17,780	\$ 18,328	\$ 18,877	\$ 19,425	\$ 19,973	\$ 20,522	\$ 21,070	\$ 21,618
	4 Net Plant	\$ 50,208	\$ 49,659	\$ 49,111	\$ 48,563	\$ 48,014	\$ 47,466	\$ 46,918	\$ 46,370	\$ 45,821	\$ 45,273	\$ 44,725	\$ 44,176
	5 Book Depreciation Rate	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%
	6 Total Depreciation	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548
B	Tax Basis of Property												
	1 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2 Reduction to Book and Tax Basis	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3 Adjusted Book and Tax Basis for Deferred Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	4 Bonus Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	5 Net Depreciable Plant	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963
	6 Book Depreciation Rate	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%
	7 Book Style Depreciation for Deferred Taxes	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466
	8 Accumulated Book Depreciation	\$ 13,249	\$ 13,715	\$ 14,181	\$ 14,647	\$ 15,113	\$ 15,579	\$ 16,045	\$ 16,511	\$ 16,977	\$ 17,443	\$ 17,909	\$ 18,375
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation	\$ 291	\$ 291	\$ 291	\$ 291	\$ 291	\$ 291	\$ 291	\$ 291	\$ 291	\$ 291	\$ 291	\$ 291
	11 Accumulated Tax Depreciation	\$ 43,981	\$ 44,272	\$ 44,563	\$ 44,854	\$ 45,145	\$ 45,437	\$ 45,728	\$ 46,019	\$ 46,310	\$ 46,602	\$ 46,893	\$ 47,184
	12 Tax/Book Depreciation Difference	\$ (175)	\$ (175)	\$ (175)	\$ (175)	\$ (175)	\$ (175)	\$ (175)	\$ (175)	\$ (175)	\$ (175)	\$ (175)	\$ (175)
	13 Accumulated Tax/Book Depreciation Difference	\$ 30,732	\$ 30,557	\$ 30,382	\$ 30,207	\$ 30,032	\$ 29,857	\$ 29,683	\$ 29,508	\$ 29,333	\$ 29,158	\$ 28,983	\$ 28,809
	14 Income Tax Rate	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%
	15 Deferred Income Tax Expense - debit (credit)	\$ (50)	\$ (50)	\$ (50)	\$ (50)	\$ (50)	\$ (50)	\$ (50)	\$ (50)	\$ (50)	\$ (50)	\$ (50)	\$ (50)
	16 Excess Deferred Income Tax	\$ 3,250	\$ 3,189	\$ 3,127	\$ 3,065	\$ 3,003	\$ 2,942	\$ 2,880	\$ 2,818	\$ 2,756	\$ 2,695	\$ 2,633	\$ 2,571
	17 Excess Deferred Income Tax Amortization	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62
	18 Accumulated Deferred Income Tax	\$ 8,833	\$ 8,783	\$ 8,732	\$ 8,682	\$ 8,632	\$ 8,582	\$ 8,531	\$ 8,481	\$ 8,431	\$ 8,381	\$ 8,330	\$ 8,280
	19 Adjusted Accumulated Deferred Income Tax	\$ 12,021	\$ 11,909	\$ 11,797	\$ 11,685	\$ 11,573	\$ 11,461	\$ 11,349	\$ 11,237	\$ 11,125	\$ 11,013	\$ 10,901	\$ 10,789
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant	\$ 50,208	\$ 49,659	\$ 49,111	\$ 48,563	\$ 48,014	\$ 47,466	\$ 46,918	\$ 46,370	\$ 45,821	\$ 45,273	\$ 44,725	\$ 44,176
	2 Less Accumulated Deferred Income Tax Liability	\$ 12,021	\$ 11,909	\$ 11,797	\$ 11,685	\$ 11,573	\$ 11,461	\$ 11,349	\$ 11,237	\$ 11,125	\$ 11,013	\$ 10,901	\$ 10,789
	3 Rate Base	\$ 38,186	\$ 37,750	\$ 37,313	\$ 36,877	\$ 36,441	\$ 36,005	\$ 35,568	\$ 35,132	\$ 34,696	\$ 34,259	\$ 33,823	\$ 33,387
	4 Average Rate Base	\$ 38,404	\$ 37,968	\$ 37,532	\$ 37,095	\$ 36,659	\$ 36,223	\$ 35,786	\$ 35,350	\$ 34,914	\$ 34,478	\$ 34,041	\$ 33,605
	5 Current Return on CWIP												
	6 After Tax Return on Equity	\$ 159	\$ 157	\$ 156	\$ 154	\$ 152	\$ 150	\$ 148	\$ 147	\$ 145	\$ 143	\$ 141	\$ 139
	7 Income Tax Component	\$ 64	\$ 64	\$ 63	\$ 62	\$ 61	\$ 61	\$ 60	\$ 59	\$ 58	\$ 58	\$ 57	\$ 56
	8 Interest Expense Component	\$ 67	\$ 66	\$ 65	\$ 64	\$ 64	\$ 63	\$ 62	\$ 61	\$ 61	\$ 60	\$ 59	\$ 58
	9 Total Return on Average Rate Base	\$ 290	\$ 287	\$ 284	\$ 280	\$ 277	\$ 274	\$ 271	\$ 267	\$ 264	\$ 261	\$ 257	\$ 254
	10 Depreciation Expense	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548
	11 Property Tax	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	12 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ 839	\$ 835	\$ 832	\$ 829	\$ 825	\$ 822	\$ 819	\$ 816	\$ 812	\$ 809	\$ 806	\$ 802

Minnesota Power
Renewable Resources Rider 2020 Factor Filing
Project 108533 Revenue Requirements

108533 - In Service 9/16/2016

Section	Line	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
A	Book Basis of Property												
	1 CWIP												
	2 Plant in Service	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795	\$ 65,795
	3 Accumulated Depreciation	\$ 22,167	\$ 22,715	\$ 23,263	\$ 23,811	\$ 24,360	\$ 24,908	\$ 25,456	\$ 26,005	\$ 26,553	\$ 27,101	\$ 27,649	\$ 28,198
	4 Net Plant	\$ 43,628	\$ 43,080	\$ 42,532	\$ 41,983	\$ 41,435	\$ 40,887	\$ 40,338	\$ 39,790	\$ 39,242	\$ 38,694	\$ 38,145	\$ 37,597
	5 Book Depreciation Rate	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%
	6 Total Depreciation	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548
B	Tax Basis of Property												
	1 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2 Reduction to Book and Tax Basis	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3 Adjusted Book and Tax Basis for Deferred Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	4 Bonus Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	5 Net Depreciable Plant	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963	\$ 27,963
	6 Book Depreciation Rate	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%	0.833%
	7 Book Style Depreciation for Deferred Taxes	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466	\$ 466
	8 Accumulated Book Depreciation	\$ 18,842	\$ 19,308	\$ 19,774	\$ 20,240	\$ 20,706	\$ 21,172	\$ 21,638	\$ 22,104	\$ 22,570	\$ 23,036	\$ 23,502	\$ 23,968
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation	\$ 208	\$ 208	\$ 208	\$ 208	\$ 208	\$ 208	\$ 208	\$ 208	\$ 208	\$ 208	\$ 208	\$ 208
	11 Accumulated Tax Depreciation	\$ 47,392	\$ 47,601	\$ 47,809	\$ 48,017	\$ 48,225	\$ 48,433	\$ 48,642	\$ 48,850	\$ 49,058	\$ 49,266	\$ 49,475	\$ 49,683
	12 Tax/Book Depreciation Difference	\$ (258)	\$ (258)	\$ (258)	\$ (258)	\$ (258)	\$ (258)	\$ (258)	\$ (258)	\$ (258)	\$ (258)	\$ (258)	\$ (258)
	13 Accumulated Tax/Book Depreciation Difference	\$ 28,551	\$ 28,293	\$ 28,035	\$ 27,777	\$ 27,520	\$ 27,262	\$ 27,004	\$ 26,746	\$ 26,488	\$ 26,230	\$ 25,973	\$ 25,715
	14 Income Tax Rate	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%
	15 Deferred Income Tax Expense - debit (credit)	\$ (74)	\$ (74)	\$ (74)	\$ (74)	\$ (74)	\$ (74)	\$ (74)	\$ (74)	\$ (74)	\$ (74)	\$ (74)	\$ (74)
	16 Excess Deferred Income Tax	\$ 2,509	\$ 2,448	\$ 2,386	\$ 2,324	\$ 2,262	\$ 2,201	\$ 2,139	\$ 2,077	\$ 2,015	\$ 1,953	\$ 1,892	\$ 1,830
	17 Excess Deferred Income Tax Amortization	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62
	18 Accumulated Deferred Income Tax	\$ 8,206	\$ 8,132	\$ 8,058	\$ 7,984	\$ 7,910	\$ 7,836	\$ 7,761	\$ 7,687	\$ 7,613	\$ 7,539	\$ 7,465	\$ 7,391
	19 Adjusted Accumulated Deferred Income Tax	\$ 10,654	\$ 10,518	\$ 10,382	\$ 10,246	\$ 10,110	\$ 9,974	\$ 9,838	\$ 9,703	\$ 9,567	\$ 9,431	\$ 9,295	\$ 9,159
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C	Revenue Requirements												
	1 Net Plant	\$ 43,628	\$ 43,080	\$ 42,532	\$ 41,983	\$ 41,435	\$ 40,887	\$ 40,338	\$ 39,790	\$ 39,242	\$ 38,694	\$ 38,145	\$ 37,597
	2 Less Accumulated Deferred Income Tax Liability	\$ 10,654	\$ 10,518	\$ 10,382	\$ 10,246	\$ 10,110	\$ 9,974	\$ 9,838	\$ 9,703	\$ 9,567	\$ 9,431	\$ 9,295	\$ 9,159
	3 Rate Base	\$ 32,974	\$ 32,562	\$ 32,150	\$ 31,737	\$ 31,325	\$ 30,912	\$ 30,500	\$ 30,087	\$ 29,675	\$ 29,263	\$ 28,850	\$ 28,438
	4 Average Rate Base	\$ 33,181	\$ 32,768	\$ 32,356	\$ 31,943	\$ 31,531	\$ 31,119	\$ 30,706	\$ 30,294	\$ 29,881	\$ 29,469	\$ 29,056	\$ 28,644
	5 Current Return on CWIP												
	6 After Tax Return on Equity	\$ 138	\$ 136	\$ 134	\$ 132	\$ 131	\$ 129	\$ 127	\$ 126	\$ 124	\$ 122	\$ 121	\$ 119
	7 Income Tax Component	\$ 56	\$ 55	\$ 54	\$ 53	\$ 53	\$ 52	\$ 51	\$ 51	\$ 50	\$ 49	\$ 49	\$ 48
	8 Interest Expense Component	\$ 58	\$ 57	\$ 56	\$ 56	\$ 55	\$ 54	\$ 53	\$ 53	\$ 52	\$ 51	\$ 51	\$ 50
	9 Total Return on Average Rate Base	\$ 251	\$ 248	\$ 245	\$ 241	\$ 238	\$ 235	\$ 232	\$ 229	\$ 226	\$ 223	\$ 220	\$ 217
	10 Depreciation Expense	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548
	11 Property Tax	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	12 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	13 Revenue Requirements	\$ 799	\$ 796	\$ 793	\$ 790	\$ 787	\$ 784	\$ 780	\$ 777	\$ 774	\$ 771	\$ 768	\$ 765

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Property Taxes by Project

Property Taxes

	107804	107805	107806	108533
2016				
2017	\$ 12,590	\$ 4,516	\$ 2,476	\$ -
2018	\$ 12,185	\$ 4,370	\$ 2,397	\$ -
2019	\$ 11,579	\$ 4,153	\$ 2,278	\$ -
2020	\$ 11,593	\$ 4,158	\$ 2,281	\$ -

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Plant Additions, AFUDC and Return on CWIP

Capex Input
Return on CWIP starts 4/16

	Total	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
Distribution Upgrade													
Project # 107804	\$ 597,790												
In Service 10/14/2016													
BOM	\$ -	\$ 180	\$ 12,166	\$ 18,125	\$ 31,328	\$ 59,927	\$ 158,418	\$ 244,382	\$ 495,254	\$ 540,471	\$ 541,739	\$ 541,835	\$ 541,835
CapEx	\$ 912,506	\$ 1,136	\$ 40,142	\$ 30,127	\$ 46,486	\$ 50,471	\$ 125,978	\$ 122,410	\$ 281,043	\$ 133,086	\$ 3,899	\$ 632	\$ 736
Less Internal Cost	\$ (314,716)	\$ (956)	\$ (28,157)	\$ (24,168)	\$ (33,283)	\$ (21,873)	\$ (27,487)	\$ (36,445)	\$ (30,171)	\$ (87,869)	\$ (2,630)	\$ (536)	\$ (639)
AFUDC	\$ 3	\$ 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Less AFUDC on Internal Cost	\$ (2)	\$ (2)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EOM	\$ 180	\$ 12,166	\$ 18,125	\$ 31,328	\$ 59,927	\$ 158,418	\$ 244,382	\$ 495,254	\$ 540,471	\$ 541,739	\$ 541,835	\$ 541,932	\$ 541,932
Return on CWIP													
After Tax Return on Equity	\$ 7,327	\$ 29	\$ 71	\$ 116	\$ 214	\$ 513	\$ 946	\$ 1,736	\$ 2,432	\$ 1,270			
Income Tax Component	\$ 5,170	\$ 20	\$ 50	\$ 82	\$ 151	\$ 362	\$ 667	\$ 1,225	\$ 1,716	\$ 896			
Interest Expense Component	\$ 3,303	\$ 13	\$ 32	\$ 52	\$ 97	\$ 231	\$ 426	\$ 783	\$ 1,096	\$ 573			
Total Return on CWIP	\$ 15,800	\$ -	\$ 63	\$ 153	\$ 250	\$ 462	\$ 1,105	\$ 2,039	\$ 3,744	\$ 5,243	\$ 2,739	\$ -	\$ -
Sylvan Protection Upgrade													
Project # 107805	\$ 75,510												
In Service 9/23/2016													
BOM	\$ -	\$ 39,901	\$ 39,902	\$ 39,902	\$ 39,902	\$ 39,902	\$ 39,902	\$ 39,904	\$ 39,909	\$ 39,914	\$ 43,048	\$ 57,793	\$ 72,764
CapEx	\$ 163,508	\$ 41,375	\$ 87	\$ -	\$ -	\$ -	\$ 340	\$ 524	\$ 516	\$ 7,626	\$ 44,550	\$ 64,216	\$ 2,278
Less Internal Cost	\$ (88,126)	\$ (1,601)	\$ (87)	\$ -	\$ -	\$ -	\$ (337)	\$ (519)	\$ (512)	\$ (4,492)	\$ (29,805)	\$ (49,244)	\$ (1,295)
AFUDC	\$ 133	\$ 133	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Less AFUDC on Internal Cost	\$ (5)	\$ (5)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EOM	\$ 39,901	\$ 39,902	\$ 39,902	\$ 39,902	\$ 39,902	\$ 39,902	\$ 39,904	\$ 39,909	\$ 39,914	\$ 43,048	\$ 57,793	\$ 72,764	\$ 73,748
Return on CWIP													
After Tax Return on Equity	\$ 1,409	\$ 187	\$ 187	\$ 187	\$ 187	\$ 187	\$ 187	\$ 187	\$ 187	\$ 97			
Income Tax Component	\$ 994	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 69			
Interest Expense Component	\$ 635	\$ 84	\$ 84	\$ 84	\$ 84	\$ 84	\$ 84	\$ 84	\$ 84	\$ 44			
Total Return on CWIP	\$ 3,038	\$ -	\$ 404	\$ 404	\$ 404	\$ 404	\$ 404	\$ 404	\$ 404	\$ 210	\$ -	\$ -	\$ -
Blanchard Protection Upgrade													
Project # 107806	\$ 35,821												
In Service 11/23/2016													
BOM	\$ -	\$ 16	\$ 1,030	\$ 1,445	\$ 6,925	\$ 11,019	\$ 18,964	\$ 24,375	\$ 28,694	\$ 34,557	\$ 35,099	\$ 35,099	\$ 35,099
CapEx	\$ 89,752	\$ 1,994	\$ 2,315	\$ 834	\$ 7,608	\$ 4,518	\$ 14,505	\$ 25,161	\$ 25,634	\$ 5,870	\$ 543	\$ -	\$ 129
Less Internal Cost	\$ (53,931)	\$ (1,978)	\$ (1,302)	\$ (419)	\$ (2,129)	\$ (424)	\$ (6,560)	\$ (19,749)	\$ (21,316)	\$ (7)	\$ (1)	\$ -	\$ 15
AFUDC	\$ 6	\$ 6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Less AFUDC on Internal Cost	\$ (6)	\$ (6)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EOM	\$ 16	\$ 1,030	\$ 1,445	\$ 6,925	\$ 11,019	\$ 18,964	\$ 24,375	\$ 28,694	\$ 34,557	\$ 35,099	\$ 35,099	\$ 35,099	\$ 35,244
Return on CWIP													
After Tax Return on Equity	\$ 761	\$ 2	\$ 6	\$ 20	\$ 42	\$ 70	\$ 102	\$ 125	\$ 148	\$ 164	\$ 82		
Income Tax Component	\$ 537	\$ 2	\$ 4	\$ 14	\$ 30	\$ 50	\$ 72	\$ 88	\$ 105	\$ 115	\$ 58		
Interest Expense Component	\$ 343	\$ 1	\$ 3	\$ 9	\$ 19	\$ 32	\$ 46	\$ 56	\$ 67	\$ 74	\$ 37		
Total Return on CWIP	\$ 1,641	\$ -	\$ 5	\$ 13	\$ 42	\$ 91	\$ 152	\$ 219	\$ 269	\$ 320	\$ 353	\$ 178	\$ -

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Plant Additions, AFUDC and Return on CWIP

Capex Input
Return on CWIP starts 4/16

	Total	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
Camp Ripley Fiber													
Project # 108533	\$ 65,795												
In Service 9/16/2016													
BOM	\$ -	\$ -	\$ -	\$ 23,226	\$ 34,721	\$ 47,748	\$ 52,929	\$ 54,054	\$ 115,007	\$ 115,779	\$ 64,267	\$ 12,745	
CapEx	\$ 105,566		\$ 26,474	\$ 30,444	\$ 15,154	\$ 9,568	\$ 2,826	\$ 65,409	\$ 3,033	\$ (51,117)	\$ (50,039)	\$ 48,017	
Less Internal Cost	\$ (39,771)		\$ (3,249)	\$ (18,949)	\$ (2,126)	\$ (4,387)	\$ (1,701)	\$ (4,456)	\$ (2,260)	\$ (396)	\$ (1,482)	\$ 4,924	
AFUDC	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Less AFUDC on Internal Cost	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
EOM	\$ -	\$ -	\$ 23,226	\$ 34,721	\$ 47,748	\$ 52,929	\$ 54,054	\$ 115,007	\$ 115,779	\$ 64,267	\$ 12,745	\$ 65,686	
Return on CWIP													
After Tax Return on Equity	\$ 1,539	\$ -	\$ 55	\$ 136	\$ 194	\$ 236	\$ 251	\$ 397	\$ 271				
Income Tax Component	\$ 1,086	\$ -	\$ 38	\$ 96	\$ 137	\$ 167	\$ 177	\$ 280	\$ 191				
Interest Expense Component	\$ 694	\$ -	\$ 25	\$ 61	\$ 87	\$ 107	\$ 113	\$ 179	\$ 122				
Total Return on CWIP	\$ 3,320	\$ -	\$ 118	\$ 293	\$ 417	\$ 510	\$ 542	\$ 856	\$ 584	\$ -	\$ -	\$ -	
Total													
BOM	\$ -	\$ 40,098	\$ 53,097	\$ 82,698	\$ 112,875	\$ 158,596	\$ 270,215	\$ 362,720	\$ 678,868	\$ 733,856	\$ 698,898	\$ 662,443	
CapEx	\$ 1,271,332	\$ 44,505	\$ 42,544	\$ 57,436	\$ 84,538	\$ 70,143	\$ 150,390	\$ 150,920	\$ 372,602	\$ 149,615	\$ (2,126)	\$ 14,808	\$ 51,160
Less Internal Cost	\$ (496,544)	\$ (4,535)	\$ (29,545)	\$ (27,836)	\$ (54,361)	\$ (24,422)	\$ (38,771)	\$ (58,415)	\$ (56,455)	\$ (94,628)	\$ (32,832)	\$ (51,263)	\$ 3,006
AFUDC	\$ 142	\$ 142	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Less AFUDC on Internal Cost	\$ (14)	\$ (14)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
EOM	\$ 40,098	\$ 53,097	\$ 82,698	\$ 112,875	\$ 158,596	\$ 270,215	\$ 362,720	\$ 678,868	\$ 733,856	\$ 698,898	\$ 662,443	\$ 716,609	
Return on CWIP													
After Tax Return on Equity	\$ 11,036	\$ -	\$ 219	\$ 319	\$ 459	\$ 637	\$ 1,007	\$ 1,486	\$ 2,445	\$ 2,948	\$ 1,434	\$ 82	\$ -
Income Tax Component	\$ 7,787	\$ -	\$ 154	\$ 225	\$ 324	\$ 450	\$ 710	\$ 1,048	\$ 1,725	\$ 2,080	\$ 1,012	\$ 58	\$ -
Interest Expense Component	\$ 4,975	\$ -	\$ 99	\$ 144	\$ 207	\$ 287	\$ 454	\$ 670	\$ 1,102	\$ 1,329	\$ 646	\$ 37	\$ -
Total Return on CWIP	\$ 23,799	\$ -	\$ 472	\$ 687	\$ 990	\$ 1,374	\$ 2,171	\$ 3,204	\$ 5,273	\$ 6,358	\$ 3,092	\$ 178	\$ -

**Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Input Assumptions**

MN Solar Energy Production Tax Rate

(\$/MWh) \$1.20

Generation Decline

First 12 months 3.00%

Each month thereafter 0.70%

Purchase Price for the solar asset in 1/1/2027

4,293,964

Minnesota Income Tax Rate

Prior to 2018 41.37%

Starting 1/1/2018 28.74%

Book Depreciation Rate

	Monthly	Annual	Life - years
Solar Asset	0.333%	4.000%	25
107804	0.375%	4.500%	22
107805	0.208%	2.500%	40
107806	0.230%	2.760%	36
108533	0.833%	10.000%	10

Bonus Depreciation Rate

2016 50.000%

2017 50.000%

Investment Tax Credit

107804 Qualifying Costs 50.00%

107805 Qualifying Costs 100.00%

107806 Qualifying Costs 100.00%

108533 Qualifying Costs 100.00%

Investment Tax Credit 30.00%

ITC Reduction to Book 50.00%

Tax Depreciation Rates

	<u>Solar Asset</u>		<u>107805/6</u>		<u>107804</u>
Year 1	20.000%	Year 1	5.000%	Year 1	3.750%
Year 2	32.000%	Year 2	9.500%	Year 2	7.219%
Year 3	19.200%	Year 3	8.550%	Year 3	6.677%
Year 4	11.520%	Year 4	7.700%	Year 4	6.177%
Year 5	11.520%	Year 5	6.930%	Year 5	5.713%
Year 6	5.760%	Year 6	6.230%	Year 6	5.285%
	<u>108533</u>	Year 7	5.900%	Year 7	4.888%
Year 1	14.290%	Year 8	5.900%	Year 8	4.522%
Year 2	24.490%	Year 9	5.910%	Year 9	4.462%
Year 3	17.490%	Year 10	5.900%	Year 10	4.461%
Year 4	12.490%	Year 11	5.910%	Year 11	4.462%
Year 5	8.930%	Year 12	5.900%	Year 12	4.461%
Year 6	8.920%	Year 13	5.910%	Year 13	4.462%
Year 7	8.930%	Year 14	5.900%	Year 14	4.461%
Year 8	4.460%	Year 15	5.910%	Year 15	4.462%
		Year 16	2.950%	Year 16	4.461%
				Year 17	4.462%
				Year 18	4.461%
				Year 19	4.462%
				Year 20	4.461%
				Year 21	2.231%

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Rate of Return / Cost of Capital Summary

(thousands of dollars)

MPUC Docket E015/GR-09-1151

Commission Decision (9/29/2010)

Applied Beginning 4/1/2011

Average for 13 months Ended 12/31/10

	Amount	% of Total	Component Cost	Weighted Cost	Pre-tax Rate	After-Tax Rate
Long Term Debt	\$ 696,677	45.71%	5.56%	2.540%	2.540%	1.490%
Common Equity	\$ 827,534	54.29%	10.38%	5.640%	9.610%	5.640%
	\$ 1,524,211	100.00%		8.180%	12.150%	7.130%
			Federal & State Income Tax Rate			41.37%
			Pretax "Gross-up" Factor			1.70560
			After Tax Return on Equity			5.6343% 1/
			Income Tax Component			3.9757% 2/
			Interest Expense Component			2.5400%
			Pre-tax Return			<u>12.1500%</u>

1/ Rounding forced to equity.

2/ Shown here as a component of the pretax rate of return. Can also be computed as 70.56% gross up on After Tax Return on Equity.

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Rate of Return / Cost of Capital Summary

(thousands of dollars)

MPUC Docket E015/GR-16-664

Commission Decision (1/18/2018) 1/

Used Beginning 1/1/2017

Average for 13 months Ended 12/31/17

	Amount	% of Total	Component Cost	Weighted Cost	Pre-tax Rate	After-Tax Rate
Long Term Debt	\$ 1,228,550	46.189%	4.5170%	2.0864%	2.0864%	1.220%
Common Equity	\$ 1,431,272	53.811%	9.2500%	4.9775%	8.4897%	4.978%
	<u>\$ 2,659,822</u>	<u>100.00%</u>		<u>7.0639%</u>	<u>10.5761%</u>	<u>6.198%</u>
			Federal & State Income Tax Rate			41.370%
			Pretax "Gross-up" Factor			1.70560
			After Tax Return on Equity			4.9775% 2/
			Income Tax Component			3.5122% 3/
			Interest Expense Component			2.0864%
			Pre-tax Return			<u>10.5761%</u>

1/ MPUC 3/12/2018 Order, point #2.

2/ Rounding forced to equity.

3/ Shown here as a component of the pretax rate of return. Can also be computed as 70.56% gross up on After Tax Return on Equity.

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Rate of Return / Cost of Capital Summary
(thousands of dollars)

MPUC Docket E015/GR-16-664

Commission Decision (1/18/2018) 1/

Used Beginning 12/1/2018 to Reflect Tax Reform

Average for 13 months Ended 12/31/17

	Amount	% of Total	Component Cost	Weighted Cost	Pre-tax Rate	After-Tax Rate
Long Term Debt	\$ 1,228,550	46.19%	4.517%	2.0864%	2.0864%	1.490%
Common Equity	\$ 1,431,272	53.81%	9.250%	4.9775%	6.9852%	4.978%
	<u>\$ 2,659,822</u>	<u>100.00%</u>		<u>7.0639%</u>	<u>9.0716%</u>	<u>6.468%</u>
			Federal & State Income Tax Rate			28.742%
			Pretax "Gross-up" Factor			1.40340
			After Tax Return on Equity			4.9775% 2/
			Income Tax Component			2.0077% 3/
			Interest Expense Component			2.0864%
			Pre-tax Return			<u>9.0716%</u>

1/ MPUC 3/12/2018 Order, point #2.

2/ Rounding forced to equity.

3/ Shown here as a component of the pretax rate of return. Can also be computed as 70.56% gross up on After Tax Return on Equity.

**Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Effective Taxes Rates**

	Prior To <u>2018</u>	Starting <u>2018</u>	
State Tax Rate Minnesota	9.80%	9.80%	
Federal Tax Rate - Current	35.00%	21.00%	
Composite Effective Tax Rate	0.41370	0.28742	1/
1 - Effective Tax Rate	0.58630	0.71258	
Factor for Taxable Basis (Gross Revenue Conversion Factor)	1.70561	1.40335	2/
Blended			
State Tax Rate Minnesota	9.8000%	9.8000%	
Federal Tax Rate	<u>31.5700%</u>	<u>18.9420%</u>	3/
Composite Effective Tax Rate	41.3700%	28.7420%	

1/ (State Rate + Federal Rate) - (State Rate x Federal Rate)

2/ 1+ ((Effective Tax Rate)/(1-Effective Tax Rate))

3/ Federal Rate - (State Rate x Federal Rate)

Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Energy Allocation Factors
2017 MWh with Losses 1/

	SES-Paying Customers		SES-Exempt Customers	
	MWh	%	MWh	%
Residential	1,156,310	33.63%		0.00%
General Service	729,791	21.22%		0.00%
Large Light & Power	1,528,591	44.45%	16,295	0.29%
Large Power	0	0.00%	5,576,054	99.71%
Lighting	23,907	0.70%		0.00%
Total	3,438,599	100.00%	5,592,349	100.000%

1/ 2017 Test Year Billing Units Docket E015/GR-16-664, Compliance Filing, Schedule 10, page 2, with losses, including dual fuel. Exempt Customer MWh per budget.

Minnesota Power
Renewable Resource Rider 2020 Solar Factor Filing
Solar Capacity Benefit Calculation

	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Total	Note
Accredited Capacity kW (MW x 1000)	[TRADE SECRET BEGINS]													1/
Avoided Capacity Cost (\$/kW-Year)/12	[REDACTED]													2/
Avoided Capacity Value (\$)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$19,350.00	\$19,350.00	\$19,350.00	\$19,350.00	\$19,350.00	\$19,350.00	\$19,350.00	\$135,450.00	[TRADE SECRET ENDS]
	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Total	
Accredited Capacity kW (MW x 1000)	[TRADE SECRET BEGINS]													1/
Avoided Capacity Cost (\$/kW-Year)/12	[REDACTED]													3/
Avoided Capacity Value (\$)	\$24,750.00	\$24,750.00	\$24,750.00	\$24,750.00	\$24,750.00	\$31,625.00	\$31,625.00	\$31,625.00	\$31,625.00	\$31,625.00	\$31,625.00	\$31,625.00	\$345,125.00	[TRADE SECRET ENDS]
	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Total	
Accredited Capacity kW (MW x 1000)	[TRADE SECRET BEGINS]													1/
Avoided Capacity Cost (\$/kW-Year)/12	[REDACTED]													4/
Avoided Capacity Value (\$)	\$37,950.00	\$37,950.00	\$37,950.00	\$37,950.00	\$37,950.00	\$37,950.00	\$37,950.00	\$37,950.00	\$37,950.00	\$37,950.00	\$37,950.00	\$37,950.00	\$455,400.00	[TRADE SECRET ENDS]
	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Total	
Accredited Capacity kW (MW x 1000)	[TRADE SECRET BEGINS]													1/
Avoided Capacity Cost (\$/kW-Year)/12	[REDACTED]													5/
Avoided Capacity Value (\$)	\$38,525.00	\$38,525.00	\$38,525.00	\$38,525.00	\$38,525.00	\$36,850.00	\$36,850.00	\$36,850.00	\$36,850.00	\$36,850.00	\$36,850.00	\$36,850.00	\$450,575.00	[TRADE SECRET ENDS]

1/ MISO's Planning Year (PY) runs from June 1 through May 31 of the following year. Camp Ripley was first accredited for PY 2017-2018, so there was no accredited capacity prior to 6/1/2017.

2/ Cogeneration and Small Power Production Tariff Filing, Docket No. E999/PR-17-09, January 3, 2017, Schedule G, Item G.

3/ Cogeneration and Small Power Production Tariff Filing, Docket No. E999/PR-18-09, April 26, 2018, Schedule G, Item G.

4/ Cogeneration and Small Power Production Tariff Filing, Docket No. E999/PR-19-09, January 2, 2019, Schedule G, Item G.

5/ Cogeneration and Small Power Production Tariff Filing, Docket No. E999/PR-20-09, January 2, 2020, Schedule G, Item G.

**Minnesota Power
Renewable Resources Rider 2020 Solar Factor Filing
Solar Capacity Benefit Allocation**

		Total Retail	Residential	General Service	Large Light & Power	Large Power	Lighting
All Customers							
1	Annual MISO CP Demand (loss adjusted)	1,132,599	176,522	132,984	197,746	625,347	-
2	Percent	100.000%	15.586%	11.741%	17.460%	55.213%	0.000%
SES-Exempt Customers							
3	Annual MISO CP Demand (loss adjusted)	627,433	-	-	2,086	625,347	-
4	Percent	100.000%	0.000%	0.000%	0.332%	99.668%	0.000%
SES-Paying Customers							
5	Annual MISO CP Demand (loss adjusted)	505,166	176,522	132,984	195,661	-	-
6	Percent	100.000%	34.943%	26.325%	38.732%	0.000%	0.000%
All Customers							
7	Solar Capacity Benefit 2017-2020	/1 \$1,386,550.00	\$216,107.68	\$162,794.84	\$242,091.63	\$765,555.85	\$0.00
SES-Exempt Customers							
8	Percent of MISO CP Demand (line 3 / line 1)	55.398%	0.000%	0.000%	1.055%	100.000%	0.000%
9	Solar Capacity Benefit 2017-2020 (line 7 x line 8)	/2 \$768,109.92	\$0.00	\$0.00	\$2,554.07	\$765,555.85	\$0.00
Benefit Allocated to SES-Paying Customers							
10	Solar Capacity Benefit 2017-2020 (Total line 9 x -1 x line 6)	/3 (\$768,109.92)	(\$268,400.65)	(\$202,204.94)	(\$297,504.33)	\$0.00	\$0.00

1/ Refer to Exhibit E-1. Total benefit allocated on line 2.

2/ Accrued benefits of SES-Exempt Customers to be collected for SES-Paying Customers. To be recorded in separate tracker.

3/ To be applied as a credit to revenue requirements of SES-Paying Customers. Refer to Exhibit B-2.

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Summary Annual Revenue Requirements and Cost Recovery: Community Solar Garden

Line	Item	2016	2017	2018	2019	2020	Total
1	Total Revenue Requirements	\$ 304	\$ 14,472	\$ 210,012	\$ 192,792	\$ 173,477	\$ 591,057
2	Subscribed Costs	\$ -	\$ -	\$ 179,095	\$ 192,792	\$ 173,477	\$ 545,365
3	Unsubscribed Costs	\$ 304	\$ 14,472	\$ 30,917	\$ -	\$ -	\$ 45,693
4	Costs to go through SEA	\$ -	\$ 428	\$ 27,725	\$ -	\$ -	\$ 28,153
5	Costs to go through RRR Solar Factor	\$ 304	\$ 14,044	\$ 3,191	\$ -	\$ -	\$ 17,540
6	SREC True-up for SEA Costs						\$ (555)
7	Net Costs to go through RRR Solar Factor						\$ 16,984

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden: Tracker Subscribed

12-month period

	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
<u>Revenue Requirements</u>					
Revenue Requirements	\$ 60	\$ 60	\$ 60	\$ 60	64
PPA Cost	\$ -	\$ -	\$ -	\$ -	-
Total	\$ 60	\$ 60	\$ 60	\$ 60	64

Subscriptions

Option 1 - Residential
Option 1 - Commercial
Option 2 - Residential
Option 3 - Residential

kWh per kW block

Amortization of Upfront Payments

Revenue from Subscriptions

Option 1
Option 2
Option 3

Total

1)

Revenue Requirements per Block

Number of Subscribed Blocks

Total Subscribed Costs

OR

2)

Number of Subscribed Blocks

Percentage Subscribed

Subscribed Portion

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden: Tracker Subscribed

12-month period

	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
<u>Revenue Requirements</u>												
Revenue Requirements	\$ 59	\$ 57	\$ 55	\$ 55	\$ 54	\$ 1,092	\$ 2,123	\$ 2,111	\$ 2,099	\$ 2,087	\$ 2,076	\$ 2,176
PPA Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 428
Total	\$ 59	\$ 57	\$ 55	\$ 55	\$ 54	\$ 1,092	\$ 2,123	\$ 2,111	\$ 2,099	\$ 2,087	\$ 2,076	\$ 2,604

Subscriptions

Option 1 - Residential

Option 1 - Commercial

Option 2 - Residential

Option 3 - Residential

kWh per kW block

Amortization of Upfront Payments

Revenue from Subscriptions

Option 1

Option 2

Option 3

Total

1)
Revenue Requirements per Block

Number of Subscribed Blocks

Total Subscribed Costs

OR

2)
Number of Subscribed Blocks

Percentage Subscribed
Subscribed Portion

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden: Tracker Subscribed

12-month period

	1												
	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	
<u>Revenue Requirements</u>													
Revenue Requirements	\$ 2,047	\$ 2,038	\$ 2,026	\$ 2,018	\$ 2,008	\$ 2,000	\$ 1,990	\$ 1,983	\$ 1,975	\$ 1,967	\$ 1,960	\$ 1,951	
PPA Cost	\$ 5,074	\$ 12,497	\$ 19,538	\$ 22,976	\$ 27,571	\$ 23,889	\$ 26,704	\$ 17,703	\$ 12,265	\$ 9,834	\$ 4,603	\$ 3,396	
Total	\$ 7,121	\$ 14,535	\$ 21,565	\$ 24,994	\$ 29,578	\$ 25,888	\$ 28,694	\$ 19,685	\$ 14,241	\$ 11,801	\$ 6,563	\$ 5,348	
<u>Subscriptions</u>													
Option 1 - Residential	66	66	66	70	75	75	79	83	83	83	83	83	83
Option 1 - Commercial	520	520	520	520	520	520	520	520	520	520	520	520	520
Option 2 - Residential	87	87	97	153	227	273	290	341	380	398	398	398	398
Option 3 - Residential	62	62	56	56	49	39	39	39	39	39	39	39	39
	735	735	739	799	871	907	928	983	1,022	1,040	1,040	1,040	1,040
kWh per kW block	51	122	192	225	270	234	261	174	121	97	46	34	
Amortization of Upfront Payments	\$ 16.58	\$ 16.58	\$ 16.58	\$ 16.58	\$ 16.58	\$ 16.58	\$ 16.58	\$ 16.58	\$ 16.58	\$ 16.58	\$ 16.58	\$ 16.58	\$ 16.58
<u>Revenue from Subscriptions</u>													
Option 1	\$ 9,716	\$ 9,716	\$ 9,716	\$ 9,782	\$ 9,865	\$ 9,865	\$ 9,931	\$ 9,998	\$ 9,998	\$ 9,998	\$ 9,998	\$ 9,998	\$ 9,998
Option 2	\$ 1,359	\$ 1,359	\$ 1,515	\$ 2,390	\$ 3,546	\$ 4,264	\$ 4,530	\$ 5,326	\$ 5,936	\$ 6,217	\$ 6,217	\$ 6,217	\$ 6,217
Option 3	\$ 353	\$ 842	\$ 1,198	\$ 1,402	\$ 1,472	\$ 1,015	\$ 1,135	\$ 757	\$ 527	\$ 421	\$ 199	\$ 148	
Total	\$ 11,428	\$ 11,917	\$ 12,429	\$ 13,574	\$ 14,883	\$ 15,145	\$ 15,597	\$ 16,081	\$ 16,461	\$ 16,636	\$ 16,413	\$ 16,363	
1)													
Revenue Requirements per Block	\$ 6.85	\$ 13.98	\$ 20.74	\$ 24.03	\$ 28.44	\$ 24.89	\$ 27.59	\$ 18.93	\$ 13.69	\$ 11.35	\$ 6.31	\$ 5.14	
Number of Subscribed Blocks	735	735	739	799	871	907	928	983	1,022	1,040	1,040	1,040	1,040
Total Subscribed Costs	\$ 5,033	\$ 10,272	\$ 15,323	\$ 19,202	\$ 24,772	\$ 22,578	\$ 25,604	\$ 18,607	\$ 13,994	\$ 11,801	\$ 6,563	\$ 5,348	
OR													
2)													
Number of Subscribed Blocks	735	735	739	799	871	907	928	983	1,022	1,040	1,040	1,040	1,040
Percentage Subscribed	70.67%	70.67%	71.06%	76.83%	83.75%	87.21%	89.23%	94.52%	98.27%	100.00%	100.00%	100.00%	100.00%
Subscribed Portion	\$ 5,033	\$ 10,272	\$ 15,323	\$ 19,202	\$ 24,772	\$ 22,578	\$ 25,604	\$ 18,607	\$ 13,994	\$ 11,801	\$ 6,563	\$ 5,348	

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden: Tracker Subscribed

12-month period

	2											
	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
<u>Revenue Requirements</u>												
Revenue Requirements	\$ 1,943	\$ 1,937	\$ 1,926	\$ 1,920	\$ 1,912	\$ 1,905	\$ 1,898	\$ 1,891	\$ 1,887	\$ 1,880	\$ 1,875	\$ 1,869
PPA Cost	\$ 7,220	\$ 6,666	\$ 15,032	\$ 14,909	\$ 14,900	\$ 25,690	\$ 28,411	\$ 25,563	\$ 12,713	\$ 10,444	\$ 4,653	\$ 3,746
Total	\$ 9,163	\$ 8,602	\$ 16,958	\$ 16,829	\$ 16,812	\$ 27,595	\$ 30,309	\$ 27,454	\$ 14,600	\$ 12,325	\$ 6,528	\$ 5,615
<u>Subscriptions</u>												
Option 1 - Residential	83	83	83	83	87	87	87	87	87	87	87	87
Option 1 - Commercial	520	520	520	520	520	520	520	520	520	520	520	520
Option 2 - Residential	398	398	400	400	396	396	396	396	386	386	386	386
Option 3 - Residential	39	39	37	37	37	37	37	37	47	47	47	47
	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040
kWh per kW block	71	65	149	146	148	251	276	249	125	103	46	37
Amortization of Upfront Payments	\$ 16.45	\$ 16.45	\$ 16.45	\$ 16.45	\$ 16.45	\$ 16.45	\$ 16.45	\$ 16.45	\$ 16.45	\$ 16.45	\$ 16.45	\$ 16.45
<u>Revenue from Subscriptions</u>												
Option 1	\$ 9,919	\$ 9,919	\$ 9,919	\$ 9,919	\$ 9,985	\$ 9,985	\$ 9,985	\$ 9,985	\$ 9,985	\$ 9,985	\$ 9,985	\$ 9,985
Option 2	\$ 6,217	\$ 6,217	\$ 6,248	\$ 6,248	\$ 6,186	\$ 6,186	\$ 6,186	\$ 6,186	\$ 6,029	\$ 6,029	\$ 6,029	\$ 6,029
Option 3	\$ 307	\$ 282	\$ 613	\$ 604	\$ 610	\$ 1,035	\$ 1,140	\$ 1,028	\$ 653	\$ 538	\$ 242	\$ 193
Total	\$ 16,443	\$ 16,419	\$ 16,780	\$ 16,771	\$ 16,781	\$ 17,206	\$ 17,311	\$ 17,199	\$ 16,667	\$ 16,553	\$ 16,256	\$ 16,207
1)												
Revenue Requirements per Block	\$ 8.81	\$ 8.27	\$ 16.31	\$ 16.18	\$ 16.17	\$ 26.53	\$ 29.14	\$ 26.40	\$ 14.04	\$ 11.85	\$ 6.28	\$ 5.40
Number of Subscribed Blocks	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040
Total Subscribed Costs	\$ 9,163	\$ 8,602	\$ 16,958	\$ 16,829	\$ 16,812	\$ 27,595	\$ 30,309	\$ 27,454	\$ 14,600	\$ 12,325	\$ 6,528	\$ 5,615
OR												
2)												
Number of Subscribed Blocks	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040
Percentage Subscribed	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Subscribed Portion	\$ 9,163	\$ 8,602	\$ 16,958	\$ 16,829	\$ 16,812	\$ 27,595	\$ 30,309	\$ 27,454	\$ 14,600	\$ 12,325	\$ 6,528	\$ 5,615

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden: Tracker Subscribed

12-month period

	3												
	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	
<u>Revenue Requirements</u>													
Revenue Requirements	\$ 1,862	\$ 1,855	\$ 1,848	\$ 1,842	\$ 1,836	\$ 1,830	\$ 1,823	\$ 1,818	\$ 1,814	\$ 1,810	\$ 1,805	\$ 1,800	
PPA Cost	\$ 5,814	\$ 8,794	\$ 13,843	\$ 15,404	\$ 17,409	\$ 18,401	\$ 20,753	\$ 18,122	\$ 13,908	\$ 9,166	\$ 6,011	\$ 3,909	
Total	\$ 7,675	\$ 10,650	\$ 15,691	\$ 17,246	\$ 19,244	\$ 20,231	\$ 22,576	\$ 19,941	\$ 15,722	\$ 10,976	\$ 7,816	\$ 5,710	
<u>Subscriptions</u>													
Option 1 - Residential	83	83	83	83	83	83	83	83	83	83	83	83	83
Option 1 - Commercial	520	520	520	520	520	520	520	520	520	520	520	520	520
Option 2 - Residential	400	400	400	400	400	400	400	400	400	400	400	400	400
Option 3 - Residential	37	37	37	37	37	37	37	37	37	37	37	37	37
	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040
kWh per kW block	57	87	136	152	172	181	204	179	137	90	59	39	
Amortization of Upfront Payments	\$ 16.33	\$ 16.33	\$ 16.33	\$ 16.33	\$ 16.33	\$ 16.33	\$ 16.33	\$ 16.33	\$ 16.33	\$ 16.33	\$ 16.33	\$ 16.33	\$ 16.33
<u>Revenue from Subscriptions</u>													
Option 1	\$ 9,847	\$ 9,847	\$ 9,847	\$ 9,847	\$ 9,847	\$ 9,847	\$ 9,847	\$ 9,847	\$ 9,847	\$ 9,847	\$ 9,847	\$ 9,847	\$ 9,847
Option 2	\$ 6,248	\$ 6,248	\$ 6,248	\$ 6,248	\$ 6,248	\$ 6,248	\$ 6,248	\$ 6,248	\$ 6,248	\$ 6,248	\$ 6,248	\$ 6,248	\$ 6,248
Option 3	\$ 236	\$ 357	\$ 563	\$ 626	\$ 707	\$ 748	\$ 843	\$ 736	\$ 565	\$ 372	\$ 244	\$ 159	
Total	\$ 16,331	\$ 16,452	\$ 16,658	\$ 16,721	\$ 16,802	\$ 16,843	\$ 16,938	\$ 16,831	\$ 16,660	\$ 16,467	\$ 16,339	\$ 16,254	
1)													
Revenue Requirements per Block	\$ 7.38	\$ 10.24	\$ 15.09	\$ 16.58	\$ 18.50	\$ 19.45	\$ 21.71	\$ 19.17	\$ 15.12	\$ 10.55	\$ 7.52	\$ 5.49	
Number of Subscribed Blocks	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040
Total Subscribed Costs	\$ 7,675	\$ 10,650	\$ 15,691	\$ 17,246	\$ 19,244	\$ 20,231	\$ 22,576	\$ 19,941	\$ 15,722	\$ 10,976	\$ 7,816	\$ 5,710	
OR													
2)													
Number of Subscribed Blocks	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040
Percentage Subscribed	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Subscribed Portion	\$ 7,675	\$ 10,650	\$ 15,691	\$ 17,246	\$ 19,244	\$ 20,231	\$ 22,576	\$ 19,941	\$ 15,722	\$ 10,976	\$ 7,816	\$ 5,710	

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor
Community Solar Garden: Tracker Unsubscribed

12-month period

	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
<u>Revenue Reuirements</u>					
Revenue Requirements	\$ 60	\$ 60	\$ 60	\$ 60	\$ 64
PPA Cost	\$ -	\$ -	\$ -	\$ -	-
Total	\$ 60	\$ 60	\$ 60	\$ 60	\$ 64

<u>Portion of Total CSG Cost</u>					
Revenue Requirements	100.00%	100.00%	100.00%	100.00%	100.00%
PPA Cost	0.00%	0.00%	0.00%	0.00%	0.00%

1)

Revenue Requirements per Block	\$ 0.06	\$ 0.06	\$ 0.06	\$ 0.06	0.06
Number of Unsubscribed Blocks	1,040	1,040	1,040	1,040	1,040
Total Unsubscribed Costs	\$ 60	\$ 60	\$ 60	\$ 60	64
Costs to go through RRR Solar Factor	\$ 60	\$ 60	\$ 60	\$ 60	64
Costs to go through SEA	\$ -	\$ -	\$ -	\$ -	-

OR

2)

Number of Unsubscribed Blocks	1,040	1,040	1,040	1,040	1,040
Percentage Unsubscribed	100.00%	100.00%	100.00%	100.00%	100.00%
Unsubscribed Portion	\$ 60	\$ 60	\$ 60	\$ 60	64
Costs go through Solar Factor RRR	\$ 60	\$ 60	\$ 60	\$ 60	64
Costs go through SEA	\$ -	\$ -	\$ -	\$ -	-

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor
Community Solar Garden: Tracker Unsubscribed

12-month period

	1											
	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
<u>Revenue Requirements</u>												
Revenue Requirements	\$ 2,047	\$ 2,038	\$ 2,026	\$ 2,018	\$ 2,008	\$ 2,000	\$ 1,990	\$ 1,983	\$ 1,975	\$ 1,967	\$ 1,960	\$ 1,951
PPA Cost	\$ 5,074	\$ 12,497	\$ 19,538	\$ 22,976	\$ 27,571	\$ 23,889	\$ 26,704	\$ 17,703	\$ 12,265	\$ 9,834	\$ 4,603	\$ 3,396
Total	\$ 7,121	\$ 14,535	\$ 21,565	\$ 24,994	\$ 29,578	\$ 25,888	\$ 28,694	\$ 19,685	\$ 14,241	\$ 11,801	\$ 6,563	\$ 5,348

Portion of Total CSG Cost

Revenue Requirements	28.75%	14.02%	9.40%	8.07%	6.79%	7.72%	6.94%	10.07%	13.87%	16.67%	29.86%	36.49%
PPA Cost	71.25%	85.98%	90.60%	91.93%	93.21%	92.28%	93.06%	89.93%	86.13%	83.33%	70.14%	63.51%

1)

Revenue Requirements per Block	\$ 6.85	\$ 13.98	\$ 20.74	\$ 24.03	\$ 28.44	\$ 24.89	\$ 27.59	\$ 18.93	\$ 13.69	\$ 11.35	\$ 6.31	\$ 5.14
Number of Unsubscribed Blocks	305	305	301	241	169	133	112	57	18	0	0	0
Total Unsubscribed Costs	\$ 2,088	\$ 4,263	\$ 6,241	\$ 5,792	\$ 4,806	\$ 3,311	\$ 3,090	\$ 1,079	\$ 246	\$ -	\$ -	\$ -
Costs to go through RRR Solar Factor	\$ 600	\$ 598	\$ 587	\$ 468	\$ 326	\$ 256	\$ 214	\$ 109	\$ 34	\$ -	\$ -	\$ -
Costs to go through SEA	\$ 1,488	\$ 3,665	\$ 5,655	\$ 5,324	\$ 4,480	\$ 3,055	\$ 2,876	\$ 970	\$ 212	\$ -	\$ -	\$ -

OR

2)

Number of Unsubscribed Blocks	305	305	301	241	169	133	112	57	18	0	0	0
Percentage Unsubscribed	29.33%	29.33%	28.94%	23.17%	16.25%	12.79%	10.77%	5.48%	1.73%	0.00%	0.00%	0.00%
Unsubscribed Portion	\$ 2,088	\$ 4,263	\$ 6,241	\$ 5,792	\$ 4,806	\$ 3,311	\$ 3,090	\$ 1,079	\$ 246	\$ -	\$ -	\$ -
Costs go through Solar Factor RRR	\$ 600	\$ 598	\$ 587	\$ 468	\$ 326	\$ 256	\$ 214	\$ 109	\$ 34	\$ -	\$ -	\$ -
Costs go through SEA	\$ 1,488	\$ 3,665	\$ 5,655	\$ 5,324	\$ 4,480	\$ 3,055	\$ 2,876	\$ 970	\$ 212	\$ -	\$ -	\$ -

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden Input Assumptions

MN Solar Energy Production Tax Rate				
(\$/MWh)	\$	1.20		
kW Facility				
kW		40		
PPA				
kW		1,000		
Costs (\$/MWh)	\$	103.50		
Capacity Factor - kW Facility				
First 12 months		15.0%		
Decline in Second 12 months		3.0%		
Decline in all periods thereafter		0.5%		
Capacity Factor - PPA				
First 12 months		20.6%		
Decline in all periods thereafter		0.8%		
SREC				
Discount(\$/MWh)		\$2.00		
Discount Rate				
Annual Rate		8.18%		
Amortization Rate for Option 1 Prepayment				
Annual Rate		4.00%		
Operation and Maintenance				
Annual Costs	\$	1,500		
Annual Escalation Rate		3.00%		
Composite Income Tax Rate				
Prior to 2018		41.37%		
Starting 1/1/2018		28.74%		
Bonus Depreciation				
	2016	50.00%		
	2017	50.00%		
Book Depreciation Rate				
108053	Monthly	0.333%	Annual	Life
			4.000%	25
Investment Tax Credit				
Investment Tax Credit 2016		30.00%		
Investment Tax Credit 2017		30.00%		
ITC Reduction to Book		50.00%		
Months to Amortize Actual ITC		174		
Months to Amortize Approved ITC		213		
Tax Depreciation Rates				
Year 1		20.000%		
Year 2		32.000%		
Year 3		19.200%		
Year 4		11.520%		
Year 5		11.520%		
Year 6		5.760%		

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor
Community Solar Garden: Plant Additions, AFUDC and Return on CWIP

Capex Input		Total	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17
Return on CWIP starts 8/2016															
Community Solar Small Site															
Project # 108053		\$ 202,937													
In Service 12/23/2016															
BOM	\$	-	\$ 5,939	\$ 5,939	\$ 5,939	\$ 5,939	\$ 5,939	\$ 5,939	\$ 5,939	\$ 5,939	\$ 5,939	\$ 5,939	\$ 5,939	\$ 5,939	\$ 5,939
CapEx	\$	203,277	5,939	0	0	0	0	0	0	0	0	0	0	0	\$ 197,337
Less Internal Cost	\$	(339)	0	0	0	0	0	0	0	0	0	0	0	0	\$ (339)
AFUDC	\$	-	0	0	0	0	0	0	0	0	0	0	0	0	0
Less AFUDC on Internal Cost	\$	-	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM	\$		5,939	5,939	5,939	5,939	5,939	5,939	5,939	5,939	5,939	5,939	5,939	5,939	202,937
Return on CWIP															
After Tax Return on Equity	\$	125		\$ 28	\$ 28	\$ 28	\$ 28	\$ 28	\$ 14						
Income Tax Component	\$	89		\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 10						
Interest Expense Component	\$	57		\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 6						
Total Return on CWIP	\$	271	\$ -	\$ -	\$ 60	\$ 60	\$ 60	\$ 60	\$ 30	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden Project 108053 Actual Revenue Requirements

108053 - In Service 12/23/2016

Section Line	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
A Book Basis of Property												
1 CWIP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,939	\$ 5,939	\$ 5,939	\$ 5,939	\$ 5,939	\$ 5,939	
2 Plant in Service												\$ 5,939
3 Accumulated Depreciation												\$ 10
4 Net Plant												\$ 5,929
5 Book Depreciation Rate												0.333%
6 Total Depreciation												\$ 10
B Tax Basis of Property												
1 Investment Tax Credit												\$ 1,782
2 Reduction to Book and Tax Basis												\$ 891
3 Adjusted Book and Tax Basis for Deferred Taxes												\$ 5,048
4 Bonus Depreciation												\$ 2,524
5 Net Depreciable Plant												\$ 2,524
6 Book Depreciation Rate												0.333%
7 Book Style Depreciation for Deferred Taxes												\$ 8
8 Accumulated Book Depreciation												\$ 8
9 Tax Depreciation Rate												
10 Total Tax Depreciation												\$ 3,029
11 Accumulated Tax Depreciation												\$ 3,029
12 Tax/Book Depreciation Difference												\$ 3,021
13 Accumulated Tax/Book Depreciation Difference												\$ 3,021
14 Income Tax Rate												41.37%
15 Deferred Income Tax Expense - debit (credit)												\$ 1,250
16 Excess Deferred Income Tax												
17 Excess Deferred Income Tax Amortization												
18 Accumulated Deferred Income Tax												\$ 1,250
19 Adjusted Accumulated Deferred Income Tax												
20 Amortization of Investment Tax Credit												
21 Gross-up of Amortized Investment Tax Credit												
C Revenue Requirements												
1 Net Plant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,929
2 Less Accumulated Deferred Income Tax Liability	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,250
3 Rate Base	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,680
4 Average Rate Base	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,340
5 Current Return on CWIP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 60	\$ 60	\$ 60	\$ 60	\$ 30
6 After Tax Return on Equity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11
7 Income Tax Component	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8
8 Interest Expense Component	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5
9 Total Return on Average Rate Base	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24
10 Energy Production (MWh)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 Operation and Maintenance												\$ -
12 Depreciation Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10
13 MN Solar Production Tax	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15 Revenue Requirements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 60	\$ 60	\$ 60	\$ 60	\$ 64

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden Project 108053 Actual Revenue Requirements

108053 - In Service 12/23/2016

Section Line	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 5,939	\$ 5,939	\$ 5,939	\$ 5,939	\$ 5,939	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937
3 Accumulated Depreciation	\$ 30	\$ 49	\$ 69	\$ 89	\$ 109	\$ 457	\$ 1,133	\$ 1,810	\$ 2,486	\$ 3,163	\$ 3,839	\$ 4,516
4 Net Plant	\$ 5,910	\$ 5,890	\$ 5,870	\$ 5,850	\$ 5,830	\$ 202,480	\$ 201,804	\$ 201,127	\$ 200,451	\$ 199,774	\$ 199,098	\$ 198,421
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 348	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676
B Tax Basis of Property												
1 Investment Tax Credit						\$ 59,099						
2 Reduction to Book and Tax Basis						\$ 29,550						
3 Adjusted Book and Tax Basis for Deferred Taxes						\$ 167,448						
4 Bonus Depreciation						\$ 83,724						
5 Net Depreciable Plant	\$ 2,524	\$ 2,524	\$ 2,524	\$ 2,524	\$ 2,524	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 296	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575
8 Accumulated Book Depreciation	\$ 25	\$ 42	\$ 59	\$ 76	\$ 93	\$ 388	\$ 963	\$ 1,538	\$ 2,113	\$ 2,688	\$ 3,263	\$ 3,838
9 Tax Depreciation Rate												
10 Total Tax Depreciation	\$ 67	\$ 67	\$ 67	\$ 67	\$ 67	\$ 86,184	\$ 2,459	\$ 2,459	\$ 2,459	\$ 2,459	\$ 2,459	\$ 2,459
11 Accumulated Tax Depreciation	\$ 3,096	\$ 3,164	\$ 3,231	\$ 3,298	\$ 3,366	\$ 89,549	\$ 92,009	\$ 94,468	\$ 96,927	\$ 99,387	\$ 101,846	\$ 104,306
12 Tax/Book Depreciation Difference	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 85,888	\$ 1,884	\$ 1,884	\$ 1,884	\$ 1,884	\$ 1,884	\$ 1,884
13 Accumulated Tax/Book Depreciation Difference	\$ 3,071	\$ 3,122	\$ 3,172	\$ 3,223	\$ 3,273	\$ 89,161	\$ 91,045	\$ 92,930	\$ 94,814	\$ 96,698	\$ 98,583	\$ 100,467
14 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
15 Deferred Income Tax Expense - debit (credit)	\$ 21	\$ 21	\$ 21	\$ 21	\$ 21	\$ 35,532	\$ 780	\$ 780	\$ 780	\$ 780	\$ 780	\$ 780
16 Excess Deferred Income Tax												\$ 12,689
17 Excess Deferred Income Tax Amortization												
18 Accumulated Deferred Income Tax	\$ 1,271	\$ 1,291	\$ 1,312	\$ 1,333	\$ 1,354	\$ 36,886	\$ 37,665	\$ 38,445	\$ 39,225	\$ 40,004	\$ 40,784	\$ 28,874
19 Adjusted Accumulated Deferred Income Tax												\$ 16,185
20 Amortization of Investment Tax Credit												
21 Gross-up of Amortized Investment Tax Credit												
C Revenue Requirements												
1 Net Plant	\$ 5,910	\$ 5,890	\$ 5,870	\$ 5,850	\$ 5,830	\$ 202,480	\$ 201,804	\$ 201,127	\$ 200,451	\$ 199,774	\$ 199,098	\$ 198,421
2 Less Accumulated Deferred Income Tax Liability	\$ 1,271	\$ 1,291	\$ 1,312	\$ 1,333	\$ 1,354	\$ 36,886	\$ 37,665	\$ 38,445	\$ 39,225	\$ 40,004	\$ 40,784	\$ 16,185
3 Rate Base	\$ 4,639	\$ 4,598	\$ 4,558	\$ 4,517	\$ 4,476	\$ 165,594	\$ 164,138	\$ 162,682	\$ 161,226	\$ 159,770	\$ 158,314	\$ 182,236
4 Average Rate Base	\$ 4,659	\$ 4,619	\$ 4,578	\$ 4,537	\$ 4,497	\$ 85,035	\$ 164,866	\$ 163,410	\$ 161,954	\$ 160,498	\$ 159,042	\$ 170,275
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 19	\$ 19	\$ 19	\$ 19	\$ 19	\$ 353	\$ 684	\$ 678	\$ 672	\$ 666	\$ 660	\$ 706
7 Income Tax Component	\$ 14	\$ 14	\$ 13	\$ 13	\$ 13	\$ 249	\$ 483	\$ 478	\$ 474	\$ 470	\$ 465	\$ 498
8 Interest Expense Component	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 148	\$ 287	\$ 284	\$ 282	\$ 279	\$ 277	\$ 296
9 Total Return on Average Rate Base	\$ 41	\$ 41	\$ 40	\$ 40	\$ 40	\$ 749	\$ 1,453	\$ 1,440	\$ 1,427	\$ 1,415	\$ 1,402	\$ 1,501
10 Energy Production (MWh)	2.6	4.0	6.6	5.9	6.5	7.2	8.6	7.0	6.1	4.5	2.9	1.3
11 Operation and Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12 Depreciation Expense	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 348	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676
13 MN Solar Production Tax	\$ 3	\$ 5	\$ 8	\$ 7	\$ 8	\$ 9	\$ 10	\$ 8	\$ 7	\$ 5	\$ 4	\$ 2
14 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15 Revenue Requirements	\$ 64	\$ 65	\$ 68	\$ 67	\$ 67	\$ 1,106	\$ 2,140	\$ 2,125	\$ 2,111	\$ 2,096	\$ 2,082	\$ 2,179

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden Project 108053 Actual Revenue Requirements

108053 - In Service 12/23/2016

1

Section Line	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937
3 Accumulated Depreciation	\$ 5,192	\$ 5,869	\$ 6,545	\$ 7,222	\$ 7,898	\$ 8,575	\$ 9,251	\$ 9,927	\$ 10,604	\$ 11,280	\$ 11,957	\$ 12,633
4 Net Plant	\$ 197,745	\$ 197,069	\$ 196,392	\$ 195,716	\$ 195,039	\$ 194,363	\$ 193,686	\$ 193,010	\$ 192,333	\$ 191,657	\$ 190,980	\$ 190,304
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575
8 Accumulated Book Depreciation	\$ 4,413	\$ 4,988	\$ 5,563	\$ 6,138	\$ 6,713	\$ 7,288	\$ 7,863	\$ 8,438	\$ 9,013	\$ 9,588	\$ 10,163	\$ 10,738
9 Tax Depreciation Rate												
10 Total Tax Depreciation	\$ 2,273	\$ 2,273	\$ 2,273	\$ 2,273	\$ 2,273	\$ 2,273	\$ 2,273	\$ 2,273	\$ 2,273	\$ 2,273	\$ 2,273	\$ 2,273
11 Accumulated Tax Depreciation	\$ 106,579	\$ 108,852	\$ 111,125	\$ 113,398	\$ 115,671	\$ 117,944	\$ 120,217	\$ 122,490	\$ 124,763	\$ 127,036	\$ 129,309	\$ 131,582
12 Tax/Book Depreciation Difference	\$ 1,698	\$ 1,698	\$ 1,698	\$ 1,698	\$ 1,698	\$ 1,698	\$ 1,698	\$ 1,698	\$ 1,698	\$ 1,698	\$ 1,698	\$ 1,698
13 Accumulated Tax/Book Depreciation Difference	\$ 102,165	\$ 103,863	\$ 105,561	\$ 107,260	\$ 108,958	\$ 110,656	\$ 112,354	\$ 114,052	\$ 115,750	\$ 117,448	\$ 119,146	\$ 120,844
14 Income Tax Rate	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%
15 Deferred Income Tax Expense - debit (credit)	\$ 488	\$ 488	\$ 488	\$ 488	\$ 488	\$ 488	\$ 488	\$ 488	\$ 488	\$ 488	\$ 488	\$ 488
16 Excess Deferred Income Tax	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689
17 Excess Deferred Income Tax Amortization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18 Accumulated Deferred Income Tax	\$ 29,362	\$ 29,850	\$ 30,338	\$ 30,826	\$ 31,314	\$ 31,802	\$ 32,290	\$ 32,778	\$ 33,266	\$ 33,754	\$ 34,243	\$ 34,731
19 Adjusted Accumulated Deferred Income Tax	\$ 16,673	\$ 17,161	\$ 17,649	\$ 18,137	\$ 18,625	\$ 19,113	\$ 19,601	\$ 20,089	\$ 20,577	\$ 21,065	\$ 21,553	\$ 22,041
20 Amortization of Investment Tax Credit												
21 Gross-up of Amortized Investment Tax Credit												
C Revenue Requirements												
1 Net Plant	\$ 197,745	\$ 197,069	\$ 196,392	\$ 195,716	\$ 195,039	\$ 194,363	\$ 193,686	\$ 193,010	\$ 192,333	\$ 191,657	\$ 190,980	\$ 190,304
2 Less Accumulated Deferred Income Tax Liability	\$ 16,673	\$ 17,161	\$ 17,649	\$ 18,137	\$ 18,625	\$ 19,113	\$ 19,601	\$ 20,089	\$ 20,577	\$ 21,065	\$ 21,553	\$ 22,041
3 Rate Base	\$ 181,072	\$ 179,907	\$ 178,743	\$ 177,578	\$ 176,414	\$ 175,249	\$ 174,085	\$ 172,920	\$ 171,756	\$ 170,591	\$ 169,427	\$ 168,263
4 Average Rate Base	\$ 181,654	\$ 180,489	\$ 179,325	\$ 178,161	\$ 176,996	\$ 175,832	\$ 174,667	\$ 173,503	\$ 172,338	\$ 171,174	\$ 170,009	\$ 168,845
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 753	\$ 749	\$ 744	\$ 739	\$ 734	\$ 729	\$ 725	\$ 720	\$ 715	\$ 710	\$ 705	\$ 700
7 Income Tax Component	\$ 304	\$ 302	\$ 300	\$ 298	\$ 296	\$ 294	\$ 292	\$ 290	\$ 288	\$ 286	\$ 284	\$ 282
8 Interest Expense Component	\$ 316	\$ 314	\$ 312	\$ 310	\$ 308	\$ 306	\$ 304	\$ 302	\$ 300	\$ 298	\$ 296	\$ 294
9 Total Return on Average Rate Base	\$ 1,373	\$ 1,364	\$ 1,356	\$ 1,347	\$ 1,338	\$ 1,329	\$ 1,320	\$ 1,312	\$ 1,303	\$ 1,294	\$ 1,285	\$ 1,276
10 Energy Production (MWh)	3.1	3.6	7.0	7.2	8.7	7.5	8.5	6.6	5.3	3.9	2.2	2.0
11 Operation and Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12 Depreciation Expense	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676
13 MN Solar Production Tax	\$ 4	\$ 4	\$ 8	\$ 9	\$ 10	\$ 9	\$ 10	\$ 8	\$ 6	\$ 5	\$ 3	\$ 2
14 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15 Revenue Requirements	\$ 2,053	\$ 2,045	\$ 2,041	\$ 2,032	\$ 2,025	\$ 2,015	\$ 2,007	\$ 1,996	\$ 1,986	\$ 1,975	\$ 1,964	\$ 1,955

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden Project 108053 Actual Revenue Requirements

108053 - In Service 12/23/2016

2

Section	Line	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
A	Book Basis of Property												
	1 CWIP												
	2 Plant in Service	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937
	3 Accumulated Depreciation	\$ 13,310	\$ 13,986	\$ 14,663	\$ 15,339	\$ 16,016	\$ 16,692	\$ 17,368	\$ 18,045	\$ 18,721	\$ 19,398	\$ 20,074	\$ 20,751
	4 Net Plant	\$ 189,628	\$ 188,951	\$ 188,275	\$ 187,598	\$ 186,922	\$ 186,245	\$ 185,569	\$ 184,892	\$ 184,216	\$ 183,539	\$ 182,863	\$ 182,187
	5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
	6 Total Depreciation	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676
B	Tax Basis of Property												
	1 Investment Tax Credit												
	2 Reduction to Book and Tax Basis												
	3 Adjusted Book and Tax Basis for Deferred Taxes												
	4 Bonus Depreciation												
	5 Net Depreciable Plant	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248
	6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
	7 Book Style Depreciation for Deferred Taxes	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575
	8 Accumulated Book Depreciation	\$ 11,313	\$ 11,888	\$ 12,463	\$ 13,038	\$ 13,613	\$ 14,188	\$ 14,763	\$ 15,338	\$ 15,913	\$ 16,488	\$ 17,063	\$ 17,638
	9 Tax Depreciation Rate												
	10 Total Tax Depreciation	\$ 1,364	\$ 1,364	\$ 1,364	\$ 1,364	\$ 1,364	\$ 1,364	\$ 1,364	\$ 1,364	\$ 1,364	\$ 1,364	\$ 1,364	\$ 1,364
	11 Accumulated Tax Depreciation	\$ 132,946	\$ 134,310	\$ 135,674	\$ 137,037	\$ 138,401	\$ 139,765	\$ 141,129	\$ 142,493	\$ 143,856	\$ 145,220	\$ 146,584	\$ 147,948
	12 Tax/Book Depreciation Difference	\$ 789	\$ 789	\$ 789	\$ 789	\$ 789	\$ 789	\$ 789	\$ 789	\$ 789	\$ 789	\$ 789	\$ 789
	13 Accumulated Tax/Book Depreciation Difference	\$ 121,633	\$ 122,422	\$ 123,210	\$ 123,999	\$ 124,788	\$ 125,577	\$ 126,366	\$ 127,154	\$ 127,943	\$ 128,732	\$ 129,521	\$ 130,310
	14 Income Tax Rate	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%
	15 Deferred Income Tax Expense - debit (credit)	\$ 227	\$ 227	\$ 227	\$ 227	\$ 227	\$ 227	\$ 227	\$ 227	\$ 227	\$ 227	\$ 227	\$ 227
	16 Excess Deferred Income Tax	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689
	17 Excess Deferred Income Tax Amortization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	18 Accumulated Deferred Income Tax	\$ 34,957	\$ 35,184	\$ 35,411	\$ 35,637	\$ 35,864	\$ 36,091	\$ 36,317	\$ 36,544	\$ 36,771	\$ 36,998	\$ 37,224	\$ 37,451
	19 Adjusted Accumulated Deferred Income Tax	\$ 22,268	\$ 22,495	\$ 22,722	\$ 22,948	\$ 23,175	\$ 23,402	\$ 23,628	\$ 23,855	\$ 24,082	\$ 24,309	\$ 24,535	\$ 24,762
	20 Amortization of Investment Tax Credit												
	21 Gross-up of Amortized Investment Tax Credit												
C	Revenue Requirements												
	1 Net Plant	\$ 189,628	\$ 188,951	\$ 188,275	\$ 187,598	\$ 186,922	\$ 186,245	\$ 185,569	\$ 184,892	\$ 184,216	\$ 183,539	\$ 182,863	\$ 182,187
	2 Less Accumulated Deferred Income Tax Liability	\$ 22,268	\$ 22,495	\$ 22,722	\$ 22,948	\$ 23,175	\$ 23,402	\$ 23,628	\$ 23,855	\$ 24,082	\$ 24,309	\$ 24,535	\$ 24,762
	3 Rate Base	\$ 167,359	\$ 166,456	\$ 165,553	\$ 164,650	\$ 163,747	\$ 162,844	\$ 161,940	\$ 161,037	\$ 160,134	\$ 159,231	\$ 158,328	\$ 157,424
	4 Average Rate Base	\$ 167,811	\$ 166,908	\$ 166,005	\$ 165,101	\$ 164,198	\$ 163,295	\$ 162,392	\$ 161,489	\$ 160,586	\$ 159,682	\$ 158,779	\$ 157,876
	5 Current Return on CWIP												
	6 After Tax Return on Equity	\$ 696	\$ 692	\$ 689	\$ 685	\$ 681	\$ 677	\$ 674	\$ 670	\$ 666	\$ 662	\$ 659	\$ 655
	7 Income Tax Component	\$ 281	\$ 279	\$ 278	\$ 276	\$ 275	\$ 273	\$ 272	\$ 270	\$ 269	\$ 267	\$ 266	\$ 264
	8 Interest Expense Component	\$ 292	\$ 290	\$ 289	\$ 287	\$ 285	\$ 284	\$ 282	\$ 281	\$ 279	\$ 278	\$ 276	\$ 274
	9 Total Return on Average Rate Base	\$ 1,269	\$ 1,262	\$ 1,255	\$ 1,248	\$ 1,241	\$ 1,234	\$ 1,228	\$ 1,221	\$ 1,214	\$ 1,207	\$ 1,200	\$ 1,193
	10 Energy Production (MWh)	2.2	1.9	6.5	5.3	7.1	7.9	7.6	7.4	4.3	3.9	2.2	1.4
	11 Operation and Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	12 Depreciation Expense	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676
	13 MN Solar Production Tax	\$ 3	\$ 2	\$ 8	\$ 6	\$ 9	\$ 9	\$ 9	\$ 9	\$ 5	\$ 5	\$ 3	\$ 2
	14 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	15 Revenue Requirements	\$ 1,948	\$ 1,941	\$ 1,939	\$ 1,931	\$ 1,926	\$ 1,920	\$ 1,913	\$ 1,906	\$ 1,896	\$ 1,888	\$ 1,879	\$ 1,872

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden Project 108053 Actual Revenue Requirements

108053 - In Service 12/23/2016

3

Section Line	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937	\$ 202,937
3 Accumulated Depreciation	\$ 21,427	\$ 22,104	\$ 22,780	\$ 23,457	\$ 24,133	\$ 24,809	\$ 25,486	\$ 26,162	\$ 26,839	\$ 27,515	\$ 28,192	\$ 28,868
4 Net Plant	\$ 181,510	\$ 180,834	\$ 180,157	\$ 179,481	\$ 178,804	\$ 178,128	\$ 177,451	\$ 176,775	\$ 176,098	\$ 175,422	\$ 174,745	\$ 174,069
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248	\$ 86,248
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575
8 Accumulated Book Depreciation	\$ 18,213	\$ 18,788	\$ 19,363	\$ 19,938	\$ 20,513	\$ 21,088	\$ 21,663	\$ 22,238	\$ 22,813	\$ 23,388	\$ 23,963	\$ 24,538
9 Tax Depreciation Rate												
10 Total Tax Depreciation	\$ 828	\$ 828	\$ 828	\$ 828	\$ 828	\$ 828	\$ 828	\$ 828	\$ 828	\$ 828	\$ 828	\$ 828
11 Accumulated Tax Depreciation	\$ 148,776	\$ 149,604	\$ 150,432	\$ 151,260	\$ 152,088	\$ 152,916	\$ 153,744	\$ 154,572	\$ 155,400	\$ 156,228	\$ 157,056	\$ 157,884
12 Tax/Book Depreciation Difference	\$ 253	\$ 253	\$ 253	\$ 253	\$ 253	\$ 253	\$ 253	\$ 253	\$ 253	\$ 253	\$ 253	\$ 253
13 Accumulated Tax/Book Depreciation Difference	\$ 130,563	\$ 130,816	\$ 131,069	\$ 131,322	\$ 131,575	\$ 131,828	\$ 132,081	\$ 132,334	\$ 132,587	\$ 132,840	\$ 133,093	\$ 133,346
14 Income Tax Rate	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%	28.74%
15 Deferred Income Tax Expense - debit (credit)	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73
16 Excess Deferred Income Tax	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689	\$ 12,689
17 Excess Deferred Income Tax Amortization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18 Accumulated Deferred Income Tax	\$ 37,524	\$ 37,596	\$ 37,669	\$ 37,742	\$ 37,815	\$ 37,887	\$ 37,960	\$ 38,033	\$ 38,105	\$ 38,178	\$ 38,251	\$ 38,324
19 Adjusted Accumulated Deferred Income Tax	\$ 24,835	\$ 24,907	\$ 24,980	\$ 25,053	\$ 25,126	\$ 25,198	\$ 25,271	\$ 25,344	\$ 25,416	\$ 25,489	\$ 25,562	\$ 25,635
20 Amortization of Investment Tax Credit												
21 Gross-up of Amortized Investment Tax Credit												
C Revenue Requirements												
1 Net Plant	\$ 181,510	\$ 180,834	\$ 180,157	\$ 179,481	\$ 178,804	\$ 178,128	\$ 177,451	\$ 176,775	\$ 176,098	\$ 175,422	\$ 174,745	\$ 174,069
2 Less Accumulated Deferred Income Tax Liability	\$ 24,835	\$ 24,907	\$ 24,980	\$ 25,053	\$ 25,126	\$ 25,198	\$ 25,271	\$ 25,344	\$ 25,416	\$ 25,489	\$ 25,562	\$ 25,635
3 Rate Base	\$ 156,675	\$ 155,926	\$ 155,177	\$ 154,428	\$ 153,679	\$ 152,929	\$ 152,180	\$ 151,431	\$ 150,682	\$ 149,933	\$ 149,184	\$ 148,434
4 Average Rate Base	\$ 157,050	\$ 156,301	\$ 155,552	\$ 154,802	\$ 154,053	\$ 153,304	\$ 152,555	\$ 151,806	\$ 151,057	\$ 150,307	\$ 149,558	\$ 148,809
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 651	\$ 648	\$ 645	\$ 642	\$ 639	\$ 636	\$ 633	\$ 630	\$ 627	\$ 623	\$ 620	\$ 617
7 Income Tax Component	\$ 263	\$ 262	\$ 260	\$ 259	\$ 258	\$ 256	\$ 255	\$ 254	\$ 253	\$ 251	\$ 250	\$ 249
8 Interest Expense Component	\$ 273	\$ 272	\$ 270	\$ 269	\$ 268	\$ 267	\$ 265	\$ 264	\$ 263	\$ 261	\$ 260	\$ 259
9 Total Return on Average Rate Base	\$ 1,187	\$ 1,182	\$ 1,176	\$ 1,170	\$ 1,165	\$ 1,159	\$ 1,153	\$ 1,148	\$ 1,142	\$ 1,136	\$ 1,131	\$ 1,125
10 Energy Production (MWh)	2.3	3.5	5.5	6.1	6.9	7.3	8.2	7.1	5.5	3.6	2.4	1.5
11 Operation and Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12 Depreciation Expense	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676	\$ 676
13 MN Solar Production Tax	\$ 3	\$ 4	\$ 7	\$ 7	\$ 8	\$ 9	\$ 10	\$ 9	\$ 7	\$ 4	\$ 3	\$ 2
14 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15 Revenue Requirements	\$ 1,866	\$ 1,862	\$ 1,859	\$ 1,854	\$ 1,849	\$ 1,844	\$ 1,840	\$ 1,833	\$ 1,825	\$ 1,817	\$ 1,810	\$ 1,803

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden Actual Cost per kWh

Pricing per kWh

12-month period		Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
Section	Line												
	Days in Month	31	28	31	30	31	30	31	31	30	31	30	31
	Hours of Production	24	24	24	24	24	24	24	24	24	24	24	24
A	kW Facility												
	1 Capacity Factor	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	14.6%
	2 kW Size	40	40	40	40	40	40	40	40	40	40	40	40
	3 Production (kWh)	2,563	4,021	6,573	5,859	6,457	7,207	8,564	7,038	6,126	4,479	2,945	1,269
	4 Revenue Requirements	\$ 64	\$ 65	\$ 68	\$ 67	\$ 67	\$ 1,106	\$ 2,140	\$ 2,125	\$ 2,111	\$ 2,096	\$ 2,082	\$ 2,179
	5 SREC Discount (\$/MWh)	\$ 5	\$ 8	\$ 13	\$ 12	\$ 13	\$ 14	\$ 17	\$ 14	\$ 12	\$ 9	\$ 6	\$ 3
	6 Net Revenue Requirements	\$ 59	\$ 57	\$ 55	\$ 55	\$ 54	\$ 1,092	\$ 2,123	\$ 2,111	\$ 2,099	\$ 2,087	\$ 2,076	\$ 2,176
	7 Monthly \$/kWh	\$ 0.02	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.15	\$ 0.25	\$ 0.30	\$ 0.34	\$ 0.47	\$ 0.70	\$ 1.71
B	PPA												
	1 Capacity Factor											20.6%	20.6%
	2 kW Size											1,000	1,000
	3 Production (kWh)											0	4,213
	4 PPA Cost											\$ -	\$ 436
	5 SREC Discount (\$/MWh)											\$ -	\$ 8
	6 Net Revenue Requirements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 428
	7 Monthly \$/kWh											#DIV/0!	\$ 0.10
C	Total												
	1 Total Production	2,563	4,021	6,573	5,859	6,457	7,207	8,564	7,038	6,126	4,479	2,945	5,482
	2 Total Cost per Month	\$ 59	\$ 57	\$ 55	\$ 55	\$ 54	\$ 1,092	\$ 2,123	\$ 2,111	\$ 2,099	\$ 2,087	\$ 2,076	\$ 2,604
	3 Total Cost per kWh	\$ 0.0229	\$ 0.0142	\$ 0.0084	\$ 0.0094	\$ 0.0084	\$ 0.1515	\$ 0.2479	\$ 0.2999	\$ 0.3426	\$ 0.4660	\$ 0.7049	\$ 0.4750

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden Actual Cost per kWh

Pricing per kWh

12-month period		1											
Section	Line	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
	Days in Month	31	28	31	30	31	30	31	31	30	31	30	31
	Hours of Production	24	24	24	24	24	24	24	24	24	24	24	24
A	kW Facility												
	1 Capacity Factor	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.5%
	2 kW Size	40	40	40	40	40	40	40	40	40	40	40	40
	3 Production (kWh)	3,120	3,627	7,047	7,181	8,687	7,536	8,485	6,573	5,288	3,874	2,249	1,988
	4 Revenue Requirements	\$ 2,053	\$ 2,045	\$ 2,041	\$ 2,032	\$ 2,025	\$ 2,015	\$ 2,007	\$ 1,996	\$ 1,986	\$ 1,975	\$ 1,964	\$ 1,955
	5 SREC Discount (\$/MWh)	\$ 6	\$ 7	\$ 14	\$ 14	\$ 17	\$ 15	\$ 17	\$ 13	\$ 11	\$ 8	\$ 4	\$ 4
	6 Net Revenue Requirements	\$ 2,047	\$ 2,038	\$ 2,026	\$ 2,018	\$ 2,008	\$ 2,000	\$ 1,990	\$ 1,983	\$ 1,975	\$ 1,967	\$ 1,960	\$ 1,951
	7 Monthly \$/kWh	\$ 0.66	\$ 0.56	\$ 0.29	\$ 0.28	\$ 0.23	\$ 0.27	\$ 0.23	\$ 0.30	\$ 0.37	\$ 0.51	\$ 0.87	\$ 0.98
B	PPA												
	1 Capacity Factor	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	20.4%	20.4%
	2 kW Size	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	3 Production (kWh)	49,989	123,119	192,494	226,367	271,631	235,356	263,091	174,410	120,842	96,886	45,351	33,462
	4 PPA Cost	\$ 5,174	\$ 12,743	\$ 19,923	\$ 23,429	\$ 28,114	\$ 24,359	\$ 27,230	\$ 18,051	\$ 12,507	\$ 10,028	\$ 4,694	\$ 3,463
	5 SREC Discount (\$/MWh)	\$ 100	\$ 246	\$ 385	\$ 453	\$ 543	\$ 471	\$ 526	\$ 349	\$ 242	\$ 194	\$ 91	\$ 67
	6 Net Revenue Requirements	\$ 5,074	\$ 12,497	\$ 19,538	\$ 22,976	\$ 27,571	\$ 23,889	\$ 26,704	\$ 17,703	\$ 12,265	\$ 9,834	\$ 4,603	\$ 3,396
	7 Monthly \$/kWh	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10
C	Total												
	1 Total Production	53,109	126,746	199,541	233,548	280,318	242,892	271,576	180,983	126,130	100,760	47,600	35,450
	2 Total Cost per Month	\$ 7,121	\$ 14,535	\$ 21,565	\$ 24,994	\$ 29,578	\$ 25,888	\$ 28,694	\$ 19,685	\$ 14,241	\$ 11,801	\$ 6,563	\$ 5,348
	3 Total Cost per kWh	\$ 0.1341	\$ 0.1147	\$ 0.1081	\$ 0.1070	\$ 0.1055	\$ 0.1066	\$ 0.1057	\$ 0.1088	\$ 0.1129	\$ 0.1171	\$ 0.1379	\$ 0.1509

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden Actual Cost per kWh

Pricing per kWh

12-month period		2											
Section	Line	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
	Days in Month	31	28	31	30	31	30	31	31	30	31	30	31
	Hours of Production	24	24	24	24	24	24	24	24	24	24	24	24
A	kW Facility												
	1 Capacity Factor	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.4%
	2 kW Size	40	40	40	40	40	40	40	40	40	40	40	40
	3 Production (kWh)	2,242	1,905	6,476	5,341	7,132	7,862	7,569	7,440	4,330	3,911	2,180	1,359
	4 Revenue Requirements	\$ 1,948	\$ 1,941	\$ 1,939	\$ 1,931	\$ 1,926	\$ 1,920	\$ 1,913	\$ 1,906	\$ 1,896	\$ 1,888	\$ 1,879	\$ 1,872
	5 SREC Discount (\$/MWh)	\$ 4	\$ 4	\$ 13	\$ 11	\$ 14	\$ 16	\$ 15	\$ 15	\$ 9	\$ 8	\$ 4	\$ 3
	6 Net Revenue Requirements	\$ 1,943	\$ 1,937	\$ 1,926	\$ 1,920	\$ 1,912	\$ 1,905	\$ 1,898	\$ 1,891	\$ 1,887	\$ 1,880	\$ 1,875	\$ 1,869
	7 Monthly \$/kWh	\$ 0.87	\$ 1.02	\$ 0.30	\$ 0.36	\$ 0.27	\$ 0.24	\$ 0.25	\$ 0.25	\$ 0.44	\$ 0.48	\$ 0.86	\$ 1.38
B	PPA												
	1 Capacity Factor	20.4%	20.4%	20.4%	20.4%	20.4%	20.4%	20.4%	20.4%	20.4%	20.4%	20.3%	20.3%
	2 kW Size	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	3 Production (kWh)	71,131	65,671	148,096	146,886	146,798	253,104	279,915	251,853	125,256	102,901	45,844	36,911
	4 PPA Cost	\$ 7,362	\$ 6,797	\$ 15,328	\$ 15,203	\$ 15,194	\$ 26,196	\$ 28,971	\$ 26,067	\$ 12,964	\$ 10,650	\$ 4,745	\$ 3,820
	5 SREC Discount (\$/MWh)	\$ 142	\$ 131	\$ 296	\$ 294	\$ 294	\$ 506	\$ 560	\$ 504	\$ 251	\$ 206	\$ 92	\$ 74
	6 Net Revenue Requirements	\$ 7,220	\$ 6,666	\$ 15,032	\$ 14,909	\$ 14,900	\$ 25,690	\$ 28,411	\$ 25,563	\$ 12,713	\$ 10,444	\$ 4,653	\$ 3,746
	7 Monthly \$/kWh	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10
C	Total												
	1 Total Production	73,373	67,576	154,572	152,227	153,930	260,966	287,484	259,293	129,586	106,812	48,024	38,270
	2 Total Cost per Month	\$ 9,163	\$ 8,602	\$ 16,958	\$ 16,829	\$ 16,812	\$ 27,595	\$ 30,309	\$ 27,454	\$ 14,600	\$ 12,325	\$ 6,528	\$ 5,615
	3 Total Cost per kWh	\$ 0.1249	\$ 0.1273	\$ 0.1097	\$ 0.1106	\$ 0.1092	\$ 0.1057	\$ 0.1054	\$ 0.1059	\$ 0.1127	\$ 0.1154	\$ 0.1359	\$ 0.1467

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden Actual Cost per kWh

Pricing per kWh

12-month period		3											
Section	Line	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
	Days in Month	31	29	31	30	31	30	31	31	30	31	30	31
	Hours of Production	24	24	24	24	24	24	24	24	24	24	24	24
A	kW Facility												
	1 Capacity Factor	14.4%	14.4%	14.4%	14.4%	14.4%	14.4%	14.4%	14.4%	14.4%	14.4%	14.4%	14.3%
	2 kW Size	40	40	40	40	40	40	40	40	40	40	40	40
	3 Production (kWh)	2,291	3,466	5,455	6,071	6,861	7,252	8,178	7,142	5,481	3,612	2,369	1,541
	4 Revenue Requirements	\$ 1,866	\$ 1,862	\$ 1,859	\$ 1,854	\$ 1,849	\$ 1,844	\$ 1,840	\$ 1,833	\$ 1,825	\$ 1,817	\$ 1,810	\$ 1,803
	5 SREC Discount (\$/MWh)	\$ 5	\$ 7	\$ 11	\$ 12	\$ 14	\$ 15	\$ 16	\$ 14	\$ 11	\$ 7	\$ 5	\$ 3
	6 Net Revenue Requirements	\$ 1,862	\$ 1,855	\$ 1,848	\$ 1,842	\$ 1,836	\$ 1,830	\$ 1,823	\$ 1,818	\$ 1,814	\$ 1,810	\$ 1,805	\$ 1,800
	7 Monthly \$/kWh	\$ 0.81	\$ 0.54	\$ 0.34	\$ 0.30	\$ 0.27	\$ 0.25	\$ 0.22	\$ 0.25	\$ 0.33	\$ 0.50	\$ 0.76	\$ 1.17
B	PPA												
	1 Capacity Factor	20.3%	20.3%	20.3%	20.3%	20.3%	20.3%	20.3%	20.3%	20.3%	20.3%	20.1%	20.1%
	2 kW Size	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	3 Production (kWh)	57,277	86,645	136,380	151,768	171,514	181,295	204,461	178,546	137,024	90,307	59,218	38,516
	4 PPA Cost	\$ 5,928	\$ 8,968	\$ 14,115	\$ 15,708	\$ 17,752	\$ 18,764	\$ 21,162	\$ 18,480	\$ 14,182	\$ 9,347	\$ 6,129	\$ 3,986
	5 SREC Discount (\$/MWh)	\$ 115	\$ 173	\$ 273	\$ 304	\$ 343	\$ 363	\$ 409	\$ 357	\$ 274	\$ 181	\$ 118	\$ 77
	6 Net Revenue Requirements	\$ 5,814	\$ 8,794	\$ 13,843	\$ 15,404	\$ 17,409	\$ 18,401	\$ 20,753	\$ 18,122	\$ 13,908	\$ 9,166	\$ 6,011	\$ 3,909
	7 Monthly \$/kWh	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10	\$ 0.10
C	Total												
	1 Total Production	59,568	90,111	141,836	157,839	178,375	188,547	212,640	185,688	142,505	93,919	61,586	40,057
	2 Total Cost per Month	\$ 7,675	\$ 10,650	\$ 15,691	\$ 17,246	\$ 19,244	\$ 20,231	\$ 22,576	\$ 19,941	\$ 15,722	\$ 10,976	\$ 7,816	\$ 5,710
	3 Total Cost per kWh	\$ 0.1289	\$ 0.1182	\$ 0.1106	\$ 0.1093	\$ 0.1079	\$ 0.1073	\$ 0.1062	\$ 0.1074	\$ 0.1103	\$ 0.1169	\$ 0.1269	\$ 0.1425

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden Approved Capex Input 1/

Capex Input													
Return on CWIP starts 8/2016													
	Total	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
Distribution Upgrade													
Project # 108053	\$ 258,053												
In Service 10/1/2016													
BOM	\$ -	\$ 27,867	\$ 55,911	\$ 84,132	\$ 112,531	\$ 141,108	\$ 169,876	\$ 198,822	\$ 227,946	\$ 257,247	\$ 258,053	\$ 258,053	
CapEx	\$ 250,000	\$ 27,778	\$ 27,778	\$ 27,778	\$ 27,778	\$ 27,778	\$ 27,778	\$ 27,778	\$ 27,778	\$ 27,778	\$ 0		
Less Internal Cost	\$ -	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0		
AFUDC	\$ 8,053	\$ 89	\$ 266	\$ 444	\$ 621	\$ 799	\$ 991	\$ 1,168	\$ 1,346	\$ 1,523	\$ 806		
Less AFUDC on Internal Cost	\$ -	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0		
EOM		\$ 27,867	\$ 55,911	\$ 84,132	\$ 112,531	\$ 141,108	\$ 169,876	\$ 198,822	\$ 227,946	\$ 257,247	\$ 258,053	\$ 258,053	\$ 258,053
Return on CWIP													
After Tax Return on Equity	\$ -												
Income Tax Component	\$ -												
Interest Expense Component	\$ -												
Total Return on CWIP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total													
	\$ 258,053												
BOM	\$ -	\$ 27,867	\$ 55,911	\$ 84,132	\$ 112,531	\$ 141,108	\$ 169,876	\$ 198,822	\$ 227,946	\$ 257,247	\$ 258,053	\$ 258,053	
CapEx	\$ 250,000	\$ 27,778	\$ 27,778	\$ 27,778	\$ 27,778	\$ 27,778	\$ 27,778	\$ 27,778	\$ 27,778	\$ 27,778	\$ -	\$ -	\$ -
Less Internal Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AFUDC	\$ 8,053	\$ 89	\$ 266	\$ 444	\$ 621	\$ 799	\$ 991	\$ 1,168	\$ 1,346	\$ 1,523	\$ 806	\$ -	\$ -
Less AFUDC on Internal Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EOM		\$ 27,867	\$ 55,911	\$ 84,132	\$ 112,531	\$ 141,108	\$ 169,876	\$ 198,822	\$ 227,946	\$ 257,247	\$ 258,053	\$ 258,053	\$ 258,053
Return on CWIP													
After Tax Return on Equity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Income Tax Component	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Expense Component	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Return on CWIP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

1/ Refer to Minnesota Power's Supplemental Comments, 4/14/2016, Docket E015/M-15-825, Exhibit C, page 11.

Minnesota Power
Renewable Resources Rider: 2020 Solar Facotr Filing
Community Solar Garden: Approved Revenue Requirement Project 108053 1/

108053 - In Service 10/1/2016

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Section Line	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
A Book Basis of Property												
1 CWIP	\$ 27,867	\$ 55,911	\$ 84,132	\$ 112,531	\$ 141,108	\$ 169,876	\$ 198,822	\$ 227,946	\$ 257,247			
2 Plant in Service										\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation										\$ 430	\$ 1,290	\$ 2,150
4 Net Plant										\$ 257,622	\$ 256,762	\$ 255,902
5 Book Depreciation Rate										0.333%	0.333%	0.333%
6 Total Depreciation										\$ 430	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit										\$ 77,416		
2 Reduction to Book and Tax Basis										\$ 38,708		
3 Adjusted Book and Tax Basis for Deferred Taxes										\$ 219,345		
4 Bonus Depreciation										\$ 109,672		
5 Net Depreciable Plant										\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate										0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes										\$ 366	\$ 731	\$ 731
8 Accumulated Book Depreciation										\$ 366	\$ 1,097	\$ 1,828
9 Tax Depreciation Rate												
10 Total Tax Depreciation										\$ 116,984	\$ 7,311	\$ 7,311
11 Accumulated Tax Depreciation										\$ 116,984	\$ 124,295	\$ 131,607
12 Tax/Book Depreciation Difference										\$ 116,618	\$ 6,580	\$ 6,580
13 Income Tax Rate										41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)										\$ 48,245	\$ 2,722	\$ 2,722
15 Accumulated Deferred Income Tax										\$ 48,245	\$ 50,967	\$ 53,690
16 Amortization of Investment Tax Credit												
17 Gross-up of Amortized Investment Tax Credit												
C Revenue Requirements												
1 Net Plant										\$ 257,622	\$ 256,762	\$ 255,902
2 Less Accumulated Deferred Income Tax Liability										\$ 48,245	\$ 50,967	\$ 53,690
3 Rate Base										\$ 209,378	\$ 205,795	\$ 202,213
4 Average Rate Base										\$ 104,689	\$ 207,586	\$ 204,004
5 Current Return on CWIP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6 After Tax Return on Equity										\$ 492	\$ 975	\$ 958
7 Income Tax Component										\$ 347	\$ 688	\$ 676
8 Interest Expense Component										\$ 222	\$ 439	\$ 432
9 Total Return on Average Rate Base										\$ 1,060	\$ 2,102	\$ 2,066
10 Energy Production (MWh)										4.5	4.3	4.5
11 Operation and Maintenance										\$ 125	\$ 125	\$ 125
12 Depreciation Expense										\$ 430	\$ 860	\$ 860
13 MN Solar Production Tax										\$ 5	\$ 5	\$ 5
14 Investment Tax Credit										\$ -	\$ -	\$ -
15 Revenue Requirements										\$ 1,620	\$ 3,092	\$ 3,056

1/ Refer to Minnesota Power's Supplemental Comments, 4/14/2016, Docket E015/M-15-825, Exhibit C, pages 7-11 for annual summary.

Minnesota Power
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Community Solar Garden: Approved Revenue Requirement Project 108053 1/

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Section Line	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 3,011	\$ 3,871	\$ 4,731	\$ 5,591	\$ 6,451	\$ 7,311	\$ 8,172	\$ 9,032	\$ 9,892	\$ 10,752	\$ 11,612	\$ 12,473
4 Net Plant	\$ 255,042	\$ 254,182	\$ 253,322	\$ 252,461	\$ 251,601	\$ 250,741	\$ 249,881	\$ 249,021	\$ 248,161	\$ 247,300	\$ 246,440	\$ 245,580
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 2,559	\$ 3,290	\$ 4,021	\$ 4,752	\$ 5,484	\$ 6,215	\$ 6,946	\$ 7,677	\$ 8,408	\$ 9,139	\$ 9,871	\$ 10,602
9 Tax Depreciation Rate												
10 Total Tax Depreciation	\$ 2,925	\$ 2,925	\$ 2,925	\$ 2,925	\$ 2,925	\$ 2,925	\$ 2,925	\$ 2,925	\$ 2,925	\$ 2,925	\$ 2,925	\$ 2,925
11 Accumulated Tax Depreciation	\$ 134,531	\$ 137,456	\$ 140,381	\$ 143,305	\$ 146,230	\$ 149,154	\$ 152,079	\$ 155,004	\$ 157,928	\$ 160,853	\$ 163,777	\$ 166,702
12 Tax/Book Depreciation Difference	\$ 2,193	\$ 2,193	\$ 2,193	\$ 2,193	\$ 2,193	\$ 2,193	\$ 2,193	\$ 2,193	\$ 2,193	\$ 2,193	\$ 2,193	\$ 2,193
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ 907	\$ 907	\$ 907	\$ 907	\$ 907	\$ 907	\$ 907	\$ 907	\$ 907	\$ 907	\$ 907	\$ 907
15 Accumulated Deferred Income Tax	\$ 54,597	\$ 55,504	\$ 56,412	\$ 57,319	\$ 58,227	\$ 59,134	\$ 60,042	\$ 60,949	\$ 61,856	\$ 62,764	\$ 63,671	\$ 64,579
16 Amortization of Investment Tax Credit												
17 Gross-up of Amortized Investment Tax Credit												
C Revenue Requirements												
1 Net Plant	\$ 255,042	\$ 254,182	\$ 253,322	\$ 252,461	\$ 251,601	\$ 250,741	\$ 249,881	\$ 249,021	\$ 248,161	\$ 247,300	\$ 246,440	\$ 245,580
2 Less Accumulated Deferred Income Tax Liability	\$ 54,597	\$ 55,504	\$ 56,412	\$ 57,319	\$ 58,227	\$ 59,134	\$ 60,042	\$ 60,949	\$ 61,856	\$ 62,764	\$ 63,671	\$ 64,579
3 Rate Base	\$ 200,445	\$ 198,677	\$ 196,910	\$ 195,142	\$ 193,375	\$ 191,607	\$ 189,839	\$ 188,072	\$ 186,304	\$ 184,537	\$ 182,769	\$ 181,001
4 Average Rate Base	\$ 201,329	\$ 199,561	\$ 197,794	\$ 196,026	\$ 194,258	\$ 192,491	\$ 190,723	\$ 188,956	\$ 187,188	\$ 185,420	\$ 183,653	\$ 181,885
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 945	\$ 937	\$ 929	\$ 920	\$ 912	\$ 904	\$ 895	\$ 887	\$ 879	\$ 871	\$ 862	\$ 854
7 Income Tax Component	\$ 667	\$ 661	\$ 655	\$ 649	\$ 644	\$ 638	\$ 632	\$ 626	\$ 620	\$ 614	\$ 608	\$ 603
8 Interest Expense Component	\$ 426	\$ 422	\$ 419	\$ 415	\$ 411	\$ 407	\$ 404	\$ 400	\$ 396	\$ 392	\$ 389	\$ 385
9 Total Return on Average Rate Base	\$ 2,038	\$ 2,021	\$ 2,003	\$ 1,985	\$ 1,967	\$ 1,949	\$ 1,931	\$ 1,913	\$ 1,895	\$ 1,877	\$ 1,859	\$ 1,842
10 Energy Production (MWh)	4.5	4.0	4.5	4.3	4.5	4.3	4.5	4.5	4.3	4.3	4.2	4.3
11 Operation and Maintenance	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15 Revenue Requirements	\$ 3,029	\$ 3,011	\$ 2,993	\$ 2,975	\$ 2,957	\$ 2,939	\$ 2,922	\$ 2,904	\$ 2,886	\$ 2,868	\$ 2,850	\$ 2,832

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Renewable Resources Rider: 2020 Solar Facotr Filing
Community Solar Garden: Approved Revenue Requirement Project 108053 1/

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Section Line	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 13,333	\$ 14,193	\$ 15,053	\$ 15,913	\$ 16,773	\$ 17,634	\$ 18,494	\$ 19,354	\$ 20,214	\$ 21,074	\$ 21,934	\$ 22,795
4 Net Plant	\$ 244,720	\$ 243,860	\$ 243,000	\$ 242,139	\$ 241,279	\$ 240,419	\$ 239,559	\$ 238,699	\$ 237,838	\$ 236,978	\$ 236,118	\$ 235,258
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 11,333	\$ 12,064	\$ 12,795	\$ 13,526	\$ 14,257	\$ 14,989	\$ 15,720	\$ 16,451	\$ 17,182	\$ 17,913	\$ 18,644	\$ 19,375
9 Tax Depreciation Rate												
10 Total Tax Depreciation	\$ 1,755	\$ 1,755	\$ 1,755	\$ 1,755	\$ 1,755	\$ 1,755	\$ 1,755	\$ 1,755	\$ 1,755	\$ 1,755	\$ 1,755	\$ 1,755
11 Accumulated Tax Depreciation	\$ 168,457	\$ 170,211	\$ 171,966	\$ 173,721	\$ 175,476	\$ 177,231	\$ 178,985	\$ 180,740	\$ 182,495	\$ 184,250	\$ 186,004	\$ 187,759
12 Tax/Book Depreciation Difference	\$ 1,024	\$ 1,024	\$ 1,024	\$ 1,024	\$ 1,024	\$ 1,024	\$ 1,024	\$ 1,024	\$ 1,024	\$ 1,024	\$ 1,024	\$ 1,024
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ 423	\$ 423	\$ 423	\$ 423	\$ 423	\$ 423	\$ 423	\$ 423	\$ 423	\$ 423	\$ 423	\$ 423
15 Accumulated Deferred Income Tax	\$ 65,002	\$ 65,426	\$ 65,849	\$ 66,273	\$ 66,696	\$ 67,119	\$ 67,543	\$ 67,966	\$ 68,390	\$ 68,813	\$ 69,237	\$ 69,660
16 Amortization of Investment Tax Credit												
17 Gross-up of Amortized Investment Tax Credit												
C Revenue Requirements												
1 Net Plant	\$ 244,720	\$ 243,860	\$ 243,000	\$ 242,139	\$ 241,279	\$ 240,419	\$ 239,559	\$ 238,699	\$ 237,838	\$ 236,978	\$ 236,118	\$ 235,258
2 Less Accumulated Deferred Income Tax Liability	\$ 65,002	\$ 65,426	\$ 65,849	\$ 66,273	\$ 66,696	\$ 67,119	\$ 67,543	\$ 67,966	\$ 68,390	\$ 68,813	\$ 69,237	\$ 69,660
3 Rate Base	\$ 179,718	\$ 178,434	\$ 177,150	\$ 175,867	\$ 174,583	\$ 173,299	\$ 172,016	\$ 170,732	\$ 169,449	\$ 168,165	\$ 166,881	\$ 165,598
4 Average Rate Base	\$ 180,360	\$ 179,076	\$ 177,792	\$ 176,509	\$ 175,225	\$ 173,941	\$ 172,658	\$ 171,374	\$ 170,090	\$ 168,807	\$ 167,523	\$ 166,239
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 847	\$ 841	\$ 835	\$ 829	\$ 823	\$ 817	\$ 811	\$ 805	\$ 799	\$ 793	\$ 787	\$ 781
7 Income Tax Component	\$ 598	\$ 593	\$ 589	\$ 585	\$ 581	\$ 576	\$ 572	\$ 568	\$ 564	\$ 559	\$ 555	\$ 551
8 Interest Expense Component	\$ 382	\$ 379	\$ 376	\$ 374	\$ 371	\$ 368	\$ 365	\$ 363	\$ 360	\$ 357	\$ 355	\$ 352
9 Total Return on Average Rate Base	\$ 1,826	\$ 1,813	\$ 1,800	\$ 1,787	\$ 1,774	\$ 1,761	\$ 1,748	\$ 1,735	\$ 1,722	\$ 1,709	\$ 1,696	\$ 1,683
10 Energy Production (MWh)	4.3	3.9	4.3	4.2	4.3	4.2	4.3	4.3	4.2	4.3	4.2	4.3
11 Operation and Maintenance	\$ 129	\$ 129	\$ 129	\$ 129	\$ 129	\$ 129	\$ 129	\$ 129	\$ 129	\$ 129	\$ 129	\$ 129
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15 Revenue Requirements	\$ 2,820	\$ 2,807	\$ 2,794	\$ 2,781	\$ 2,768	\$ 2,755	\$ 2,742	\$ 2,729	\$ 2,716	\$ 2,703	\$ 2,690	\$ 2,677

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Section Line	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 23,655	\$ 24,515	\$ 25,375	\$ 26,235	\$ 27,096	\$ 27,956	\$ 28,816	\$ 29,676	\$ 30,536	\$ 31,396	\$ 32,257	\$ 33,117
4 Net Plant	\$ 234,398	\$ 233,538	\$ 232,677	\$ 231,817	\$ 230,957	\$ 230,097	\$ 229,237	\$ 228,377	\$ 227,516	\$ 226,656	\$ 225,796	\$ 224,936
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 20,107	\$ 20,838	\$ 21,569	\$ 22,300	\$ 23,031	\$ 23,762	\$ 24,493	\$ 25,225	\$ 25,956	\$ 26,687	\$ 27,418	\$ 28,149
9 Tax Depreciation Rate												
10 Total Tax Depreciation	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053
11 Accumulated Tax Depreciation	\$ 188,812	\$ 189,865	\$ 190,918	\$ 191,970	\$ 193,023	\$ 194,076	\$ 195,129	\$ 196,182	\$ 197,235	\$ 198,288	\$ 199,340	\$ 200,393
12 Tax/Book Depreciation Difference	\$ 322	\$ 322	\$ 322	\$ 322	\$ 322	\$ 322	\$ 322	\$ 322	\$ 322	\$ 322	\$ 322	\$ 322
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133
15 Accumulated Deferred Income Tax	\$ 69,793	\$ 69,926	\$ 70,060	\$ 70,193	\$ 70,326	\$ 70,459	\$ 70,592	\$ 70,725	\$ 70,858	\$ 70,991	\$ 71,124	\$ 71,257
16 Amortization of Investment Tax Credit												
17 Gross-up of Amortized Investment Tax Credit												
C Revenue Requirements												
1 Net Plant	\$ 234,398	\$ 233,538	\$ 232,677	\$ 231,817	\$ 230,957	\$ 230,097	\$ 229,237	\$ 228,377	\$ 227,516	\$ 226,656	\$ 225,796	\$ 224,936
2 Less Accumulated Deferred Income Tax Liability	\$ 69,793	\$ 69,926	\$ 70,060	\$ 70,193	\$ 70,326	\$ 70,459	\$ 70,592	\$ 70,725	\$ 70,858	\$ 70,991	\$ 71,124	\$ 71,257
3 Rate Base	\$ 164,604	\$ 163,611	\$ 162,618	\$ 161,625	\$ 160,631	\$ 159,638	\$ 158,645	\$ 157,652	\$ 156,658	\$ 155,665	\$ 154,672	\$ 153,678
4 Average Rate Base	\$ 165,101	\$ 164,108	\$ 163,114	\$ 162,121	\$ 161,128	\$ 160,135	\$ 159,141	\$ 158,148	\$ 157,155	\$ 156,162	\$ 155,168	\$ 154,175
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 775	\$ 771	\$ 766	\$ 761	\$ 757	\$ 752	\$ 747	\$ 743	\$ 738	\$ 733	\$ 729	\$ 724
7 Income Tax Component	\$ 547	\$ 544	\$ 540	\$ 537	\$ 534	\$ 531	\$ 527	\$ 524	\$ 521	\$ 517	\$ 514	\$ 511
8 Interest Expense Component	\$ 349	\$ 347	\$ 345	\$ 343	\$ 341	\$ 339	\$ 337	\$ 335	\$ 333	\$ 331	\$ 328	\$ 326
9 Total Return on Average Rate Base	\$ 1,672	\$ 1,662	\$ 1,652	\$ 1,641	\$ 1,631	\$ 1,621	\$ 1,611	\$ 1,601	\$ 1,591	\$ 1,581	\$ 1,571	\$ 1,561
10 Energy Production (MWh)	4.3	3.9	4.3	4.2	4.3	4.2	4.3	4.3	4.2	4.3	4.1	4.3
11 Operation and Maintenance	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15 Revenue Requirements	\$ 2,670	\$ 2,659	\$ 2,649	\$ 2,639	\$ 2,629	\$ 2,619	\$ 2,609	\$ 2,599	\$ 2,589	\$ 2,579	\$ 2,569	\$ 2,559

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Section Line	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 33,977	\$ 34,837	\$ 35,697	\$ 36,557	\$ 37,418	\$ 38,278	\$ 39,138	\$ 39,998	\$ 40,858	\$ 41,719	\$ 42,579	\$ 43,439
4 Net Plant	\$ 224,076	\$ 223,215	\$ 222,355	\$ 221,495	\$ 220,635	\$ 219,775	\$ 218,915	\$ 218,054	\$ 217,194	\$ 216,334	\$ 215,474	\$ 214,614
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 28,880	\$ 29,612	\$ 30,343	\$ 31,074	\$ 31,805	\$ 32,536	\$ 33,267	\$ 33,998	\$ 34,730	\$ 35,461	\$ 36,192	\$ 36,923
9 Tax Depreciation Rate												
10 Total Tax Depreciation	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053	\$ 1,053
11 Accumulated Tax Depreciation	\$ 201,446	\$ 202,499	\$ 203,552	\$ 204,605	\$ 205,658	\$ 206,710	\$ 207,763	\$ 208,816	\$ 209,869	\$ 210,922	\$ 211,975	\$ 213,028
12 Tax/Book Depreciation Difference	\$ 322	\$ 322	\$ 322	\$ 322	\$ 322	\$ 322	\$ 322	\$ 322	\$ 322	\$ 322	\$ 322	\$ 322
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133	\$ 133
15 Accumulated Deferred Income Tax	\$ 71,390	\$ 71,524	\$ 71,657	\$ 71,790	\$ 71,923	\$ 72,056	\$ 72,189	\$ 72,322	\$ 72,455	\$ 72,588	\$ 72,721	\$ 72,854
16 Amortization of Investment Tax Credit												
17 Gross-up of Amortized Investment Tax Credit												
C Revenue Requirements												
1 Net Plant	\$ 224,076	\$ 223,215	\$ 222,355	\$ 221,495	\$ 220,635	\$ 219,775	\$ 218,915	\$ 218,054	\$ 217,194	\$ 216,334	\$ 215,474	\$ 214,614
2 Less Accumulated Deferred Income Tax Liability	\$ 71,390	\$ 71,524	\$ 71,657	\$ 71,790	\$ 71,923	\$ 72,056	\$ 72,189	\$ 72,322	\$ 72,455	\$ 72,588	\$ 72,721	\$ 72,854
3 Rate Base	\$ 152,685	\$ 151,692	\$ 150,699	\$ 149,705	\$ 148,712	\$ 147,719	\$ 146,726	\$ 145,732	\$ 144,739	\$ 143,746	\$ 142,753	\$ 141,759
4 Average Rate Base	\$ 153,182	\$ 152,189	\$ 151,195	\$ 150,202	\$ 149,209	\$ 148,216	\$ 147,222	\$ 146,229	\$ 145,236	\$ 144,242	\$ 143,249	\$ 142,256
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 719	\$ 715	\$ 710	\$ 705	\$ 701	\$ 696	\$ 691	\$ 687	\$ 682	\$ 677	\$ 673	\$ 668
7 Income Tax Component	\$ 507	\$ 504	\$ 501	\$ 498	\$ 494	\$ 491	\$ 488	\$ 484	\$ 481	\$ 478	\$ 475	\$ 471
8 Interest Expense Component	\$ 324	\$ 322	\$ 320	\$ 318	\$ 316	\$ 314	\$ 312	\$ 310	\$ 307	\$ 305	\$ 303	\$ 301
9 Total Return on Average Rate Base	\$ 1,551	\$ 1,541	\$ 1,531	\$ 1,521	\$ 1,511	\$ 1,501	\$ 1,491	\$ 1,481	\$ 1,471	\$ 1,460	\$ 1,450	\$ 1,440
10 Energy Production (MWh)	4.3	4.0	4.3	4.1	4.3	4.1	4.3	4.3	4.1	4.3	4.1	4.3
11 Operation and Maintenance	\$ 137	\$ 137	\$ 137	\$ 137	\$ 137	\$ 137	\$ 137	\$ 137	\$ 137	\$ 137	\$ 137	\$ 137
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15 Revenue Requirements	\$ 2,553	\$ 2,542	\$ 2,533	\$ 2,523	\$ 2,513	\$ 2,502	\$ 2,493	\$ 2,482	\$ 2,472	\$ 2,462	\$ 2,452	\$ 2,442

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Section Line	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 44,299	\$ 45,159	\$ 46,019	\$ 46,880	\$ 47,740	\$ 48,600	\$ 49,460	\$ 50,320	\$ 51,180	\$ 52,041	\$ 52,901	\$ 53,761
4 Net Plant	\$ 213,754	\$ 212,893	\$ 212,033	\$ 211,173	\$ 210,313	\$ 209,453	\$ 208,593	\$ 207,732	\$ 206,872	\$ 206,012	\$ 205,152	\$ 204,292
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 37,654	\$ 38,385	\$ 39,116	\$ 39,848	\$ 40,579	\$ 41,310	\$ 42,041	\$ 42,772	\$ 43,503	\$ 44,235	\$ 44,966	\$ 45,697
9 Tax Depreciation Rate												
10 Total Tax Depreciation	\$ 526	\$ 526	\$ 526	\$ 526	\$ 526	\$ 526	\$ 526	\$ 526	\$ 526	\$ 526	\$ 526	\$ 526
11 Accumulated Tax Depreciation	\$ 213,554	\$ 214,080	\$ 214,607	\$ 215,133	\$ 215,660	\$ 216,186	\$ 216,713	\$ 217,239	\$ 217,765	\$ 218,292	\$ 218,818	\$ 219,345
12 Tax/Book Depreciation Difference	\$ (205)	\$ (205)	\$ (205)	\$ (205)	\$ (205)	\$ (205)	\$ (205)	\$ (205)	\$ (205)	\$ (205)	\$ (205)	\$ (205)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (85)	\$ (85)	\$ (85)	\$ (85)	\$ (85)	\$ (85)	\$ (85)	\$ (85)	\$ (85)	\$ (85)	\$ (85)	\$ (85)
15 Accumulated Deferred Income Tax	\$ 72,770	\$ 72,685	\$ 72,600	\$ 72,516	\$ 72,431	\$ 72,346	\$ 72,262	\$ 72,177	\$ 72,092	\$ 72,008	\$ 71,923	\$ 71,838
16 Amortization of Investment Tax Credit												
17 Gross-up of Amortized Investment Tax Credit												
C Revenue Requirements												
1 Net Plant	\$ 213,754	\$ 212,893	\$ 212,033	\$ 211,173	\$ 210,313	\$ 209,453	\$ 208,593	\$ 207,732	\$ 206,872	\$ 206,012	\$ 205,152	\$ 204,292
2 Less Accumulated Deferred Income Tax Liability	\$ 72,770	\$ 72,685	\$ 72,600	\$ 72,516	\$ 72,431	\$ 72,346	\$ 72,262	\$ 72,177	\$ 72,092	\$ 72,008	\$ 71,923	\$ 71,838
3 Rate Base	\$ 140,984	\$ 140,208	\$ 139,433	\$ 138,657	\$ 137,882	\$ 137,106	\$ 136,331	\$ 135,555	\$ 134,780	\$ 134,004	\$ 133,229	\$ 132,453
4 Average Rate Base	\$ 141,372	\$ 140,596	\$ 139,821	\$ 139,045	\$ 138,270	\$ 137,494	\$ 136,719	\$ 135,943	\$ 135,168	\$ 134,392	\$ 133,617	\$ 132,841
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 664	\$ 660	\$ 656	\$ 653	\$ 649	\$ 646	\$ 642	\$ 638	\$ 635	\$ 631	\$ 627	\$ 624
7 Income Tax Component	\$ 468	\$ 466	\$ 463	\$ 461	\$ 458	\$ 456	\$ 453	\$ 450	\$ 448	\$ 445	\$ 443	\$ 440
8 Interest Expense Component	\$ 299	\$ 298	\$ 296	\$ 294	\$ 293	\$ 291	\$ 289	\$ 288	\$ 286	\$ 284	\$ 283	\$ 281
9 Total Return on Average Rate Base	\$ 1,431	\$ 1,424	\$ 1,416	\$ 1,408	\$ 1,400	\$ 1,392	\$ 1,384	\$ 1,376	\$ 1,369	\$ 1,361	\$ 1,353	\$ 1,345
10 Energy Production (MWh)	4.3	3.9	4.3	4.1	4.3	4.1	4.3	4.3	4.1	4.2	4.1	4.2
11 Operation and Maintenance	\$ 141	\$ 141	\$ 141	\$ 141	\$ 141	\$ 141	\$ 141	\$ 141	\$ 141	\$ 141	\$ 141	\$ 141
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15 Revenue Requirements	\$ 2,437	\$ 2,429	\$ 2,422	\$ 2,414	\$ 2,406	\$ 2,398	\$ 2,390	\$ 2,382	\$ 2,374	\$ 2,367	\$ 2,359	\$ 2,351

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Section Line	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 54,621	\$ 55,481	\$ 56,341	\$ 57,202	\$ 58,062	\$ 58,922	\$ 59,782	\$ 60,642	\$ 61,503	\$ 62,363	\$ 63,223	\$ 64,083
4 Net Plant	\$ 203,431	\$ 202,571	\$ 201,711	\$ 200,851	\$ 199,991	\$ 199,131	\$ 198,270	\$ 197,410	\$ 196,550	\$ 195,690	\$ 194,830	\$ 193,970
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 46,428	\$ 47,159	\$ 47,890	\$ 48,621	\$ 49,353	\$ 50,084	\$ 50,815	\$ 51,546	\$ 52,277	\$ 53,008	\$ 53,739	\$ 54,471
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation	\$ 219,345	\$ 219,345	\$ 219,345	\$ 219,345	\$ 219,345	\$ 219,345	\$ 219,345	\$ 219,345	\$ 219,345	\$ 219,345	\$ 219,345	\$ 219,345
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 71,536	\$ 71,233	\$ 70,931	\$ 70,628	\$ 70,326	\$ 70,023	\$ 69,721	\$ 69,418	\$ 69,116	\$ 68,813	\$ 68,511	\$ 68,208
16 Amortization of Investment Tax Credit												
17 Gross-up of Amortized Investment Tax Credit												
C Revenue Requirements												
1 Net Plant	\$ 203,431	\$ 202,571	\$ 201,711	\$ 200,851	\$ 199,991	\$ 199,131	\$ 198,270	\$ 197,410	\$ 196,550	\$ 195,690	\$ 194,830	\$ 193,970
2 Less Accumulated Deferred Income Tax Liability	\$ 71,536	\$ 71,233	\$ 70,931	\$ 70,628	\$ 70,326	\$ 70,023	\$ 69,721	\$ 69,418	\$ 69,116	\$ 68,813	\$ 68,511	\$ 68,208
3 Rate Base	\$ 131,896	\$ 131,338	\$ 130,780	\$ 130,223	\$ 129,665	\$ 129,107	\$ 128,550	\$ 127,992	\$ 127,434	\$ 126,877	\$ 126,319	\$ 125,761
4 Average Rate Base	\$ 132,175	\$ 131,617	\$ 131,059	\$ 130,502	\$ 129,944	\$ 129,386	\$ 128,828	\$ 128,271	\$ 127,713	\$ 127,155	\$ 126,598	\$ 126,040
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 621	\$ 618	\$ 615	\$ 613	\$ 610	\$ 608	\$ 605	\$ 602	\$ 600	\$ 597	\$ 594	\$ 592
7 Income Tax Component	\$ 438	\$ 436	\$ 434	\$ 432	\$ 431	\$ 429	\$ 427	\$ 425	\$ 423	\$ 421	\$ 419	\$ 418
8 Interest Expense Component	\$ 280	\$ 279	\$ 277	\$ 276	\$ 275	\$ 274	\$ 273	\$ 272	\$ 270	\$ 269	\$ 268	\$ 267
9 Total Return on Average Rate Base	\$ 1,338	\$ 1,333	\$ 1,327	\$ 1,321	\$ 1,316	\$ 1,310	\$ 1,304	\$ 1,299	\$ 1,293	\$ 1,287	\$ 1,282	\$ 1,276
10 Energy Production (MWh)	4.2	3.8	4.2	4.1	4.2	4.1	4.2	4.2	4.1	4.2	4.1	4.2
11 Operation and Maintenance	\$ 145	\$ 145	\$ 145	\$ 145	\$ 145	\$ 145	\$ 145	\$ 145	\$ 145	\$ 145	\$ 145	\$ 145
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15 Revenue Requirements	\$ 2,348	\$ 2,342	\$ 2,337	\$ 2,331	\$ 2,326	\$ 2,320	\$ 2,315	\$ 2,309	\$ 2,303	\$ 2,298	\$ 2,292	\$ 2,286

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Section Line	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 64,943	\$ 65,803	\$ 66,664	\$ 67,524	\$ 68,384	\$ 69,244	\$ 70,104	\$ 70,964	\$ 71,825	\$ 72,685	\$ 73,545	\$ 74,405
4 Net Plant	\$ 193,109	\$ 192,249	\$ 191,389	\$ 190,529	\$ 189,669	\$ 188,808	\$ 187,948	\$ 187,088	\$ 186,228	\$ 185,368	\$ 184,508	\$ 183,647
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 55,202	\$ 55,933	\$ 56,664	\$ 57,395	\$ 58,126	\$ 58,857	\$ 59,589	\$ 60,320	\$ 61,051	\$ 61,782	\$ 62,513	\$ 63,244
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 67,906	\$ 67,603	\$ 67,301	\$ 66,999	\$ 66,696	\$ 66,394	\$ 66,091	\$ 65,789	\$ 65,486	\$ 65,184	\$ 64,881	\$ 64,579
16 Amortization of Investment Tax Credit												
17 Gross-up of Amortized Investment Tax Credit												
C Revenue Requirements												
1 Net Plant	\$ 193,109	\$ 192,249	\$ 191,389	\$ 190,529	\$ 189,669	\$ 188,808	\$ 187,948	\$ 187,088	\$ 186,228	\$ 185,368	\$ 184,508	\$ 183,647
2 Less Accumulated Deferred Income Tax Liability	\$ 67,906	\$ 67,603	\$ 67,301	\$ 66,999	\$ 66,696	\$ 66,394	\$ 66,091	\$ 65,789	\$ 65,486	\$ 65,184	\$ 64,881	\$ 64,579
3 Rate Base	\$ 125,203	\$ 124,646	\$ 124,088	\$ 123,530	\$ 122,973	\$ 122,415	\$ 121,857	\$ 121,300	\$ 120,742	\$ 120,184	\$ 119,626	\$ 119,069
4 Average Rate Base	\$ 125,482	\$ 124,925	\$ 124,367	\$ 123,809	\$ 123,251	\$ 122,694	\$ 122,136	\$ 121,578	\$ 121,021	\$ 120,463	\$ 119,905	\$ 119,348
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 589	\$ 587	\$ 584	\$ 581	\$ 579	\$ 576	\$ 573	\$ 571	\$ 568	\$ 566	\$ 563	\$ 560
7 Income Tax Component	\$ 416	\$ 414	\$ 412	\$ 410	\$ 408	\$ 406	\$ 405	\$ 403	\$ 401	\$ 399	\$ 397	\$ 395
8 Interest Expense Component	\$ 266	\$ 264	\$ 263	\$ 262	\$ 261	\$ 260	\$ 259	\$ 257	\$ 256	\$ 255	\$ 254	\$ 253
9 Total Return on Average Rate Base	\$ 1,271	\$ 1,265	\$ 1,259	\$ 1,254	\$ 1,248	\$ 1,242	\$ 1,237	\$ 1,231	\$ 1,225	\$ 1,220	\$ 1,214	\$ 1,208
10 Energy Production (MWh)	4.2	3.8	4.2	4.1	4.2	4.1	4.2	4.2	4.1	4.2	4.1	4.2
11 Operation and Maintenance	\$ 149	\$ 149	\$ 149	\$ 149	\$ 149	\$ 149	\$ 149	\$ 149	\$ 149	\$ 149	\$ 149	\$ 149
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15 Revenue Requirements	\$ 2,285	\$ 2,279	\$ 2,274	\$ 2,268	\$ 2,262	\$ 2,257	\$ 2,251	\$ 2,245	\$ 2,240	\$ 2,234	\$ 2,228	\$ 2,223

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Section Line	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 75,265	\$ 76,126	\$ 76,986	\$ 77,846	\$ 78,706	\$ 79,566	\$ 80,426	\$ 81,287	\$ 82,147	\$ 83,007	\$ 83,867	\$ 84,727
4 Net Plant	\$ 182,787	\$ 181,927	\$ 181,067	\$ 180,207	\$ 179,347	\$ 178,486	\$ 177,626	\$ 176,766	\$ 175,906	\$ 175,046	\$ 174,185	\$ 173,325
5 Book Depreciation Rate	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 63,976	\$ 64,707	\$ 65,438	\$ 66,169	\$ 66,900	\$ 67,631	\$ 68,362	\$ 69,094	\$ 69,825	\$ 70,556	\$ 71,287	\$ 72,018
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 64,276	\$ 63,974	\$ 63,671	\$ 63,369	\$ 63,066	\$ 62,764	\$ 62,461	\$ 62,159	\$ 61,856	\$ 61,554	\$ 61,251	\$ 60,949
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements												
1 Net Plant	\$ 182,787	\$ 181,927	\$ 181,067	\$ 180,207	\$ 179,347	\$ 178,486	\$ 177,626	\$ 176,766	\$ 175,906	\$ 175,046	\$ 174,185	\$ 173,325
2 Less Accumulated Deferred Income Tax Liability	\$ 64,276	\$ 63,974	\$ 63,671	\$ 63,369	\$ 63,066	\$ 62,764	\$ 62,461	\$ 62,159	\$ 61,856	\$ 61,554	\$ 61,251	\$ 60,949
3 Rate Base	\$ 118,511	\$ 117,953	\$ 117,396	\$ 116,838	\$ 116,280	\$ 115,723	\$ 115,165	\$ 114,607	\$ 114,049	\$ 113,492	\$ 112,934	\$ 112,376
4 Average Rate Base	\$ 118,790	\$ 118,232	\$ 117,674	\$ 117,117	\$ 116,559	\$ 116,001	\$ 115,444	\$ 114,886	\$ 114,328	\$ 113,771	\$ 113,213	\$ 112,655
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 558	\$ 555	\$ 553	\$ 550	\$ 547	\$ 545	\$ 542	\$ 539	\$ 537	\$ 534	\$ 532	\$ 529
7 Income Tax Component	\$ 394	\$ 392	\$ 390	\$ 388	\$ 386	\$ 384	\$ 382	\$ 381	\$ 379	\$ 377	\$ 375	\$ 373
8 Interest Expense Component	\$ 251	\$ 250	\$ 249	\$ 248	\$ 247	\$ 246	\$ 244	\$ 243	\$ 242	\$ 241	\$ 240	\$ 238
9 Total Return on Average Rate Base	\$ 1,203	\$ 1,197	\$ 1,191	\$ 1,186	\$ 1,180	\$ 1,175	\$ 1,169	\$ 1,163	\$ 1,158	\$ 1,152	\$ 1,146	\$ 1,141
10 Energy Production (MWh)	4.2	3.9	4.2	4.1	4.2	4.1	4.2	4.2	4.1	4.2	4.0	4.2
11 Operation and Maintenance	\$ 154	\$ 154	\$ 154	\$ 154	\$ 154	\$ 154	\$ 154	\$ 154	\$ 154	\$ 154	\$ 154	\$ 154
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 1,602	\$ 1,596	\$ 1,590	\$ 1,585	\$ 1,579	\$ 1,573	\$ 1,568	\$ 1,562	\$ 1,556	\$ 1,551	\$ 1,545	\$ 1,540

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Section Line	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 85,587	\$ 86,448	\$ 87,308	\$ 88,168	\$ 89,028	\$ 89,888	\$ 90,748	\$ 91,609	\$ 92,469	\$ 93,329	\$ 94,189	\$ 95,049
4 Net Plant	\$ 172,465	\$ 171,605	\$ 170,745	\$ 169,885	\$ 169,024	\$ 168,164	\$ 167,304	\$ 166,444	\$ 165,584	\$ 164,724	\$ 163,863	\$ 163,003
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 72,749	\$ 73,480	\$ 74,212	\$ 74,943	\$ 75,674	\$ 76,405	\$ 77,136	\$ 77,867	\$ 78,599	\$ 79,330	\$ 80,061	\$ 80,792
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 60,647	\$ 60,344	\$ 60,042	\$ 59,739	\$ 59,437	\$ 59,134	\$ 58,832	\$ 58,529	\$ 58,227	\$ 57,924	\$ 57,622	\$ 57,319
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements												
1 Net Plant	\$ 172,465	\$ 171,605	\$ 170,745	\$ 169,885	\$ 169,024	\$ 168,164	\$ 167,304	\$ 166,444	\$ 165,584	\$ 164,724	\$ 163,863	\$ 163,003
2 Less Accumulated Deferred Income Tax Liability	\$ 60,647	\$ 60,344	\$ 60,042	\$ 59,739	\$ 59,437	\$ 59,134	\$ 58,832	\$ 58,529	\$ 58,227	\$ 57,924	\$ 57,622	\$ 57,319
3 Rate Base	\$ 111,819	\$ 111,261	\$ 110,703	\$ 110,146	\$ 109,588	\$ 109,030	\$ 108,472	\$ 107,915	\$ 107,357	\$ 106,799	\$ 106,242	\$ 105,684
4 Average Rate Base	\$ 112,097	\$ 111,540	\$ 110,982	\$ 110,424	\$ 109,867	\$ 109,309	\$ 108,751	\$ 108,194	\$ 107,636	\$ 107,078	\$ 106,520	\$ 105,963
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 526	\$ 524	\$ 521	\$ 518	\$ 516	\$ 513	\$ 511	\$ 508	\$ 505	\$ 503	\$ 500	\$ 498
7 Income Tax Component	\$ 371	\$ 370	\$ 368	\$ 366	\$ 364	\$ 362	\$ 360	\$ 358	\$ 357	\$ 355	\$ 353	\$ 351
8 Interest Expense Component	\$ 237	\$ 236	\$ 235	\$ 234	\$ 233	\$ 231	\$ 230	\$ 229	\$ 228	\$ 227	\$ 225	\$ 224
9 Total Return on Average Rate Base	\$ 1,135	\$ 1,129	\$ 1,124	\$ 1,118	\$ 1,112	\$ 1,107	\$ 1,101	\$ 1,095	\$ 1,090	\$ 1,084	\$ 1,079	\$ 1,073
10 Energy Production (MWh)	4.2	3.8	4.2	4.0	4.2	4.0	4.2	4.2	4.0	4.2	4.0	4.2
11 Operation and Maintenance	\$ 158	\$ 158	\$ 158	\$ 158	\$ 158	\$ 158	\$ 158	\$ 158	\$ 158	\$ 158	\$ 158	\$ 158
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 1,539	\$ 1,532	\$ 1,527	\$ 1,522	\$ 1,516	\$ 1,510	\$ 1,505	\$ 1,499	\$ 1,493	\$ 1,488	\$ 1,482	\$ 1,476

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Section Line	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 95,910	\$ 96,770	\$ 97,630	\$ 98,490	\$ 99,350	\$ 100,210	\$ 101,071	\$ 101,931	\$ 102,791	\$ 103,651	\$ 104,511	\$ 105,371
4 Net Plant	\$ 162,143	\$ 161,283	\$ 160,423	\$ 159,563	\$ 158,702	\$ 157,842	\$ 156,982	\$ 156,122	\$ 155,262	\$ 154,401	\$ 153,541	\$ 152,681
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 81,523	\$ 82,254	\$ 82,985	\$ 83,717	\$ 84,448	\$ 85,179	\$ 85,910	\$ 86,641	\$ 87,372	\$ 88,103	\$ 88,835	\$ 89,566
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 57,017	\$ 56,714	\$ 56,412	\$ 56,109	\$ 55,807	\$ 55,504	\$ 55,202	\$ 54,899	\$ 54,597	\$ 54,295	\$ 53,992	\$ 53,690
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements												
1 Net Plant	\$ 162,143	\$ 161,283	\$ 160,423	\$ 159,563	\$ 158,702	\$ 157,842	\$ 156,982	\$ 156,122	\$ 155,262	\$ 154,401	\$ 153,541	\$ 152,681
2 Less Accumulated Deferred Income Tax Liability	\$ 57,017	\$ 56,714	\$ 56,412	\$ 56,109	\$ 55,807	\$ 55,504	\$ 55,202	\$ 54,899	\$ 54,597	\$ 54,295	\$ 53,992	\$ 53,690
3 Rate Base	\$ 105,126	\$ 104,569	\$ 104,011	\$ 103,453	\$ 102,895	\$ 102,338	\$ 101,780	\$ 101,222	\$ 100,665	\$ 100,107	\$ 99,549	\$ 98,992
4 Average Rate Base	\$ 105,405	\$ 104,847	\$ 104,290	\$ 103,732	\$ 103,174	\$ 102,617	\$ 102,059	\$ 101,501	\$ 100,944	\$ 100,386	\$ 99,828	\$ 99,270
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 495	\$ 492	\$ 490	\$ 487	\$ 484	\$ 482	\$ 479	\$ 477	\$ 474	\$ 471	\$ 469	\$ 466
7 Income Tax Component	\$ 349	\$ 347	\$ 346	\$ 344	\$ 342	\$ 340	\$ 338	\$ 336	\$ 334	\$ 333	\$ 331	\$ 329
8 Interest Expense Component	\$ 223	\$ 222	\$ 221	\$ 220	\$ 218	\$ 217	\$ 216	\$ 215	\$ 214	\$ 212	\$ 211	\$ 210
9 Total Return on Average Rate Base	\$ 1,067	\$ 1,062	\$ 1,056	\$ 1,050	\$ 1,045	\$ 1,039	\$ 1,033	\$ 1,028	\$ 1,022	\$ 1,016	\$ 1,011	\$ 1,005
10 Energy Production (MWh)	4.2	3.8	4.2	4.0	4.2	4.0	4.2	4.2	4.0	4.1	4.0	4.1
11 Operation and Maintenance	\$ 163	\$ 163	\$ 163	\$ 163	\$ 163	\$ 163	\$ 163	\$ 163	\$ 163	\$ 163	\$ 163	\$ 163
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 1,476	\$ 1,469	\$ 1,464	\$ 1,458	\$ 1,453	\$ 1,447	\$ 1,442	\$ 1,436	\$ 1,430	\$ 1,425	\$ 1,419	\$ 1,413

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Section Line	Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 106,232	\$ 107,092	\$ 107,952	\$ 108,812	\$ 109,672	\$ 110,533	\$ 111,393	\$ 112,253	\$ 113,113	\$ 113,973	\$ 114,833	\$ 115,694
4 Net Plant	\$ 151,821	\$ 150,961	\$ 150,101	\$ 149,240	\$ 148,380	\$ 147,520	\$ 146,660	\$ 145,800	\$ 144,940	\$ 144,079	\$ 143,219	\$ 142,359
5 Book Depreciation Rate	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 90,297	\$ 91,028	\$ 91,759	\$ 92,490	\$ 93,221	\$ 93,953	\$ 94,684	\$ 95,415	\$ 96,146	\$ 96,877	\$ 97,608	\$ 98,340
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 53,387	\$ 53,085	\$ 52,782	\$ 52,480	\$ 52,177	\$ 51,875	\$ 51,572	\$ 51,270	\$ 50,967	\$ 50,665	\$ 50,362	\$ 50,060
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements												
1 Net Plant	\$ 151,821	\$ 150,961	\$ 150,101	\$ 149,240	\$ 148,380	\$ 147,520	\$ 146,660	\$ 145,800	\$ 144,940	\$ 144,079	\$ 143,219	\$ 142,359
2 Less Accumulated Deferred Income Tax Liability	\$ 53,387	\$ 53,085	\$ 52,782	\$ 52,480	\$ 52,177	\$ 51,875	\$ 51,572	\$ 51,270	\$ 50,967	\$ 50,665	\$ 50,362	\$ 50,060
3 Rate Base	\$ 98,434	\$ 97,876	\$ 97,318	\$ 96,761	\$ 96,203	\$ 95,645	\$ 95,088	\$ 94,530	\$ 93,972	\$ 93,415	\$ 92,857	\$ 92,299
4 Average Rate Base	\$ 98,713	\$ 98,155	\$ 97,597	\$ 97,040	\$ 96,482	\$ 95,924	\$ 95,367	\$ 94,809	\$ 94,251	\$ 93,693	\$ 93,136	\$ 92,578
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 463	\$ 461	\$ 458	\$ 456	\$ 453	\$ 450	\$ 448	\$ 445	\$ 443	\$ 440	\$ 437	\$ 435
7 Income Tax Component	\$ 327	\$ 325	\$ 323	\$ 321	\$ 320	\$ 318	\$ 316	\$ 314	\$ 312	\$ 310	\$ 309	\$ 307
8 Interest Expense Component	\$ 209	\$ 208	\$ 207	\$ 205	\$ 204	\$ 203	\$ 202	\$ 201	\$ 199	\$ 198	\$ 197	\$ 196
9 Total Return on Average Rate Base	\$ 999	\$ 994	\$ 988	\$ 983	\$ 977	\$ 971	\$ 966	\$ 960	\$ 954	\$ 949	\$ 943	\$ 937
10 Energy Production (MWh)	4.1	3.7	4.1	4.0	4.1	4.0	4.1	4.1	4.0	4.1	4.0	4.1
11 Operation and Maintenance	\$ 168	\$ 168	\$ 168	\$ 168	\$ 168	\$ 168	\$ 168	\$ 168	\$ 168	\$ 168	\$ 168	\$ 168
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 4	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 1,413	\$ 1,407	\$ 1,401	\$ 1,396	\$ 1,390	\$ 1,384	\$ 1,379	\$ 1,373	\$ 1,367	\$ 1,362	\$ 1,356	\$ 1,351

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Section Line	Jan-28	Feb-28	Mar-28	Apr-28	May-28	Jun-28	Jul-28	Aug-28	Sep-28	Oct-28	Nov-28	Dec-28
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 116,554	\$ 117,414	\$ 118,274	\$ 119,134	\$ 119,994	\$ 120,855	\$ 121,715	\$ 122,575	\$ 123,435	\$ 124,295	\$ 125,156	\$ 126,016
4 Net Plant	\$ 141,499	\$ 140,639	\$ 139,778	\$ 138,918	\$ 138,058	\$ 137,198	\$ 136,338	\$ 135,478	\$ 134,617	\$ 133,757	\$ 132,897	\$ 132,037
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 99,071	\$ 99,802	\$ 100,533	\$ 101,264	\$ 101,995	\$ 102,726	\$ 103,458	\$ 104,189	\$ 104,920	\$ 105,651	\$ 106,382	\$ 107,113
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 49,757	\$ 49,455	\$ 49,152	\$ 48,850	\$ 48,547	\$ 48,245	\$ 47,942	\$ 47,640	\$ 47,338	\$ 47,035	\$ 46,733	\$ 46,430
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements												
1 Net Plant	\$ 141,499	\$ 140,639	\$ 139,778	\$ 138,918	\$ 138,058	\$ 137,198	\$ 136,338	\$ 135,478	\$ 134,617	\$ 133,757	\$ 132,897	\$ 132,037
2 Less Accumulated Deferred Income Tax Liability	\$ 49,757	\$ 49,455	\$ 49,152	\$ 48,850	\$ 48,547	\$ 48,245	\$ 47,942	\$ 47,640	\$ 47,338	\$ 47,035	\$ 46,733	\$ 46,430
3 Rate Base	\$ 91,741	\$ 91,184	\$ 90,626	\$ 90,068	\$ 89,511	\$ 88,953	\$ 88,395	\$ 87,838	\$ 87,280	\$ 86,722	\$ 86,164	\$ 85,607
4 Average Rate Base	\$ 92,020	\$ 91,463	\$ 90,905	\$ 90,347	\$ 89,790	\$ 89,232	\$ 88,674	\$ 88,116	\$ 87,559	\$ 87,001	\$ 86,443	\$ 85,886
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 432	\$ 429	\$ 427	\$ 424	\$ 422	\$ 419	\$ 416	\$ 414	\$ 411	\$ 408	\$ 406	\$ 403
7 Income Tax Component	\$ 305	\$ 303	\$ 301	\$ 299	\$ 297	\$ 296	\$ 294	\$ 292	\$ 290	\$ 288	\$ 286	\$ 285
8 Interest Expense Component	\$ 195	\$ 194	\$ 192	\$ 191	\$ 190	\$ 189	\$ 188	\$ 187	\$ 185	\$ 184	\$ 183	\$ 182
9 Total Return on Average Rate Base	\$ 932	\$ 926	\$ 920	\$ 915	\$ 909	\$ 903	\$ 898	\$ 892	\$ 887	\$ 881	\$ 875	\$ 870
10 Energy Production (MWh)	4.1	3.9	4.1	4.0	4.1	4.0	4.1	4.1	4.0	4.1	4.0	4.1
11 Operation and Maintenance	\$ 173	\$ 173	\$ 173	\$ 173	\$ 173	\$ 173	\$ 173	\$ 173	\$ 173	\$ 173	\$ 173	\$ 173
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 1,350	\$ 1,344	\$ 1,339	\$ 1,333	\$ 1,327	\$ 1,322	\$ 1,316	\$ 1,310	\$ 1,305	\$ 1,299	\$ 1,293	\$ 1,288

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Section Line	Jan-29	Feb-29	Mar-29	Apr-29	May-29	Jun-29	Jul-29	Aug-29	Sep-29	Oct-29	Nov-29	Dec-29
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 126,876	\$ 127,736	\$ 128,596	\$ 129,456	\$ 130,317	\$ 131,177	\$ 132,037	\$ 132,897	\$ 133,757	\$ 134,617	\$ 135,478	\$ 136,338
4 Net Plant	\$ 131,177	\$ 130,317	\$ 129,456	\$ 128,596	\$ 127,736	\$ 126,876	\$ 126,016	\$ 125,156	\$ 124,295	\$ 123,435	\$ 122,575	\$ 121,715
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 107,844	\$ 108,576	\$ 109,307	\$ 110,038	\$ 110,769	\$ 111,500	\$ 112,231	\$ 112,963	\$ 113,694	\$ 114,425	\$ 115,156	\$ 115,887
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 46,128	\$ 45,825	\$ 45,523	\$ 45,220	\$ 44,918	\$ 44,615	\$ 44,313	\$ 44,010	\$ 43,708	\$ 43,405	\$ 43,103	\$ 42,800
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements												
1 Net Plant	\$ 131,177	\$ 130,317	\$ 129,456	\$ 128,596	\$ 127,736	\$ 126,876	\$ 126,016	\$ 125,156	\$ 124,295	\$ 123,435	\$ 122,575	\$ 121,715
2 Less Accumulated Deferred Income Tax Liability	\$ 46,128	\$ 45,825	\$ 45,523	\$ 45,220	\$ 44,918	\$ 44,615	\$ 44,313	\$ 44,010	\$ 43,708	\$ 43,405	\$ 43,103	\$ 42,800
3 Rate Base	\$ 85,049	\$ 84,491	\$ 83,934	\$ 83,376	\$ 82,818	\$ 82,261	\$ 81,703	\$ 81,145	\$ 80,587	\$ 80,030	\$ 79,472	\$ 78,914
4 Average Rate Base	\$ 85,328	\$ 84,770	\$ 84,213	\$ 83,655	\$ 83,097	\$ 82,539	\$ 81,982	\$ 81,424	\$ 80,866	\$ 80,309	\$ 79,751	\$ 79,193
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 401	\$ 398	\$ 395	\$ 393	\$ 390	\$ 388	\$ 385	\$ 382	\$ 380	\$ 377	\$ 374	\$ 372
7 Income Tax Component	\$ 283	\$ 281	\$ 279	\$ 277	\$ 275	\$ 273	\$ 272	\$ 270	\$ 268	\$ 266	\$ 264	\$ 262
8 Interest Expense Component	\$ 181	\$ 179	\$ 178	\$ 177	\$ 176	\$ 175	\$ 174	\$ 172	\$ 171	\$ 170	\$ 169	\$ 168
9 Total Return on Average Rate Base	\$ 864	\$ 858	\$ 853	\$ 847	\$ 841	\$ 836	\$ 830	\$ 824	\$ 819	\$ 813	\$ 807	\$ 802
10 Energy Production (MWh)	4.1	3.7	4.1	4.0	4.1	4.0	4.1	4.1	4.0	4.1	3.9	4.1
11 Operation and Maintenance	\$ 178	\$ 178	\$ 178	\$ 178	\$ 178	\$ 178	\$ 178	\$ 178	\$ 178	\$ 178	\$ 178	\$ 178
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 4	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 1,287	\$ 1,281	\$ 1,276	\$ 1,270	\$ 1,265	\$ 1,259	\$ 1,253	\$ 1,248	\$ 1,242	\$ 1,237	\$ 1,231	\$ 1,225

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Section Line	Jan-30	Feb-30	Mar-30	Apr-30	May-30	Jun-30	Jul-30	Aug-30	Sep-30	Oct-30	Nov-30	Dec-30
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 137,198	\$ 138,058	\$ 138,918	\$ 139,778	\$ 140,639	\$ 141,499	\$ 142,359	\$ 143,219	\$ 144,079	\$ 144,940	\$ 145,800	\$ 146,660
4 Net Plant	\$ 120,855	\$ 119,994	\$ 119,134	\$ 118,274	\$ 117,414	\$ 116,554	\$ 115,694	\$ 114,833	\$ 113,973	\$ 113,113	\$ 112,253	\$ 111,393
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 116,618	\$ 117,349	\$ 118,081	\$ 118,812	\$ 119,543	\$ 120,274	\$ 121,005	\$ 121,736	\$ 122,467	\$ 123,199	\$ 123,930	\$ 124,661
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 42,498	\$ 42,195	\$ 41,893	\$ 41,590	\$ 41,288	\$ 40,986	\$ 40,683	\$ 40,381	\$ 40,078	\$ 39,776	\$ 39,473	\$ 39,171
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements												
1 Net Plant	\$ 120,855	\$ 119,994	\$ 119,134	\$ 118,274	\$ 117,414	\$ 116,554	\$ 115,694	\$ 114,833	\$ 113,973	\$ 113,113	\$ 112,253	\$ 111,393
2 Less Accumulated Deferred Income Tax Liability	\$ 42,498	\$ 42,195	\$ 41,893	\$ 41,590	\$ 41,288	\$ 40,986	\$ 40,683	\$ 40,381	\$ 40,078	\$ 39,776	\$ 39,473	\$ 39,171
3 Rate Base	\$ 78,357	\$ 77,799	\$ 77,241	\$ 76,684	\$ 76,126	\$ 75,568	\$ 75,011	\$ 74,453	\$ 73,895	\$ 73,337	\$ 72,780	\$ 72,222
4 Average Rate Base	\$ 78,636	\$ 78,078	\$ 77,520	\$ 76,962	\$ 76,405	\$ 75,847	\$ 75,289	\$ 74,732	\$ 74,174	\$ 73,616	\$ 73,059	\$ 72,501
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 369	\$ 367	\$ 364	\$ 361	\$ 359	\$ 356	\$ 354	\$ 351	\$ 348	\$ 346	\$ 343	\$ 340
7 Income Tax Component	\$ 261	\$ 259	\$ 257	\$ 255	\$ 253	\$ 251	\$ 249	\$ 248	\$ 246	\$ 244	\$ 242	\$ 240
8 Interest Expense Component	\$ 166	\$ 165	\$ 164	\$ 163	\$ 162	\$ 161	\$ 159	\$ 158	\$ 157	\$ 156	\$ 155	\$ 153
9 Total Return on Average Rate Base	\$ 796	\$ 791	\$ 785	\$ 779	\$ 774	\$ 768	\$ 762	\$ 757	\$ 751	\$ 745	\$ 740	\$ 734
10 Energy Production (MWh)	4.1	3.7	4.1	3.9	4.1	3.9	4.1	4.1	3.9	4.1	3.9	4.1
11 Operation and Maintenance	\$ 184	\$ 184	\$ 184	\$ 184	\$ 184	\$ 184	\$ 184	\$ 184	\$ 184	\$ 184	\$ 184	\$ 184
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 4	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 1,225	\$ 1,219	\$ 1,214	\$ 1,208	\$ 1,202	\$ 1,197	\$ 1,191	\$ 1,185	\$ 1,180	\$ 1,174	\$ 1,168	\$ 1,163

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Section Line	Jan-31	Feb-31	Mar-31	Apr-31	May-31	Jun-31	Jul-31	Aug-31	Sep-31	Oct-31	Nov-31	Dec-31
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 147,520	\$ 148,380	\$ 149,240	\$ 150,101	\$ 150,961	\$ 151,821	\$ 152,681	\$ 153,541	\$ 154,401	\$ 155,262	\$ 156,122	\$ 156,982
4 Net Plant	\$ 110,533	\$ 109,672	\$ 108,812	\$ 107,952	\$ 107,092	\$ 106,232	\$ 105,371	\$ 104,511	\$ 103,651	\$ 102,791	\$ 101,931	\$ 101,071
5 Book Depreciation Rate	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 125,392	\$ 126,123	\$ 126,854	\$ 127,585	\$ 128,317	\$ 129,048	\$ 129,779	\$ 130,510	\$ 131,241	\$ 131,972	\$ 132,704	\$ 133,435
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 38,868	\$ 38,566	\$ 38,263	\$ 37,961	\$ 37,658	\$ 37,356	\$ 37,053	\$ 36,751	\$ 36,448	\$ 36,146	\$ 35,843	\$ 35,541
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements												
1 Net Plant	\$ 110,533	\$ 109,672	\$ 108,812	\$ 107,952	\$ 107,092	\$ 106,232	\$ 105,371	\$ 104,511	\$ 103,651	\$ 102,791	\$ 101,931	\$ 101,071
2 Less Accumulated Deferred Income Tax Liability	\$ 38,868	\$ 38,566	\$ 38,263	\$ 37,961	\$ 37,658	\$ 37,356	\$ 37,053	\$ 36,751	\$ 36,448	\$ 36,146	\$ 35,843	\$ 35,541
3 Rate Base	\$ 71,664	\$ 71,107	\$ 70,549	\$ 69,991	\$ 69,434	\$ 68,876	\$ 68,318	\$ 67,760	\$ 67,203	\$ 66,645	\$ 66,087	\$ 65,530
4 Average Rate Base	\$ 71,943	\$ 71,385	\$ 70,828	\$ 70,270	\$ 69,712	\$ 69,155	\$ 68,597	\$ 68,039	\$ 67,482	\$ 66,924	\$ 66,366	\$ 65,808
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 338	\$ 335	\$ 333	\$ 330	\$ 327	\$ 325	\$ 322	\$ 319	\$ 317	\$ 314	\$ 312	\$ 309
7 Income Tax Component	\$ 238	\$ 237	\$ 235	\$ 233	\$ 231	\$ 229	\$ 227	\$ 225	\$ 224	\$ 222	\$ 220	\$ 218
8 Interest Expense Component	\$ 152	\$ 151	\$ 150	\$ 149	\$ 148	\$ 146	\$ 145	\$ 144	\$ 143	\$ 142	\$ 140	\$ 139
9 Total Return on Average Rate Base	\$ 728	\$ 723	\$ 717	\$ 711	\$ 706	\$ 700	\$ 695	\$ 689	\$ 683	\$ 678	\$ 672	\$ 666
10 Energy Production (MWh)	4.1	3.7	4.1	3.9	4.1	3.9	4.1	4.1	3.9	4.0	3.9	4.0
11 Operation and Maintenance	\$ 189	\$ 189	\$ 189	\$ 189	\$ 189	\$ 189	\$ 189	\$ 189	\$ 189	\$ 189	\$ 189	\$ 189
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 4	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 1,163	\$ 1,157	\$ 1,151	\$ 1,146	\$ 1,140	\$ 1,134	\$ 1,129	\$ 1,123	\$ 1,117	\$ 1,112	\$ 1,106	\$ 1,100

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Section Line	Jan-32	Feb-32	Mar-32	Apr-32	May-32	Jun-32	Jul-32	Aug-32	Sep-32	Oct-32	Nov-32	Dec-32
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 157,842	\$ 158,702	\$ 159,563	\$ 160,423	\$ 161,283	\$ 162,143	\$ 163,003	\$ 163,863	\$ 164,724	\$ 165,584	\$ 166,444	\$ 167,304
4 Net Plant	\$ 100,210	\$ 99,350	\$ 98,490	\$ 97,630	\$ 96,770	\$ 95,910	\$ 95,049	\$ 94,189	\$ 93,329	\$ 92,469	\$ 91,609	\$ 90,748
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 134,166	\$ 134,897	\$ 135,628	\$ 136,359	\$ 137,090	\$ 137,822	\$ 138,553	\$ 139,284	\$ 140,015	\$ 140,746	\$ 141,477	\$ 142,208
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 35,238	\$ 34,936	\$ 34,634	\$ 34,331	\$ 34,029	\$ 33,726	\$ 33,424	\$ 33,121	\$ 32,819	\$ 32,516	\$ 32,214	\$ 31,911
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements												
1 Net Plant	\$ 100,210	\$ 99,350	\$ 98,490	\$ 97,630	\$ 96,770	\$ 95,910	\$ 95,049	\$ 94,189	\$ 93,329	\$ 92,469	\$ 91,609	\$ 90,748
2 Less Accumulated Deferred Income Tax Liability	\$ 35,238	\$ 34,936	\$ 34,634	\$ 34,331	\$ 34,029	\$ 33,726	\$ 33,424	\$ 33,121	\$ 32,819	\$ 32,516	\$ 32,214	\$ 31,911
3 Rate Base	\$ 64,972	\$ 64,414	\$ 63,857	\$ 63,299	\$ 62,741	\$ 62,183	\$ 61,626	\$ 61,068	\$ 60,510	\$ 59,953	\$ 59,395	\$ 58,837
4 Average Rate Base	\$ 65,251	\$ 64,693	\$ 64,135	\$ 63,578	\$ 63,020	\$ 62,462	\$ 61,905	\$ 61,347	\$ 60,789	\$ 60,231	\$ 59,674	\$ 59,116
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 306	\$ 304	\$ 301	\$ 299	\$ 296	\$ 293	\$ 291	\$ 288	\$ 285	\$ 283	\$ 280	\$ 278
7 Income Tax Component	\$ 216	\$ 214	\$ 212	\$ 211	\$ 209	\$ 207	\$ 205	\$ 203	\$ 201	\$ 200	\$ 198	\$ 196
8 Interest Expense Component	\$ 138	\$ 137	\$ 136	\$ 135	\$ 133	\$ 132	\$ 131	\$ 130	\$ 129	\$ 127	\$ 126	\$ 125
9 Total Return on Average Rate Base	\$ 661	\$ 655	\$ 649	\$ 644	\$ 638	\$ 632	\$ 627	\$ 621	\$ 615	\$ 610	\$ 604	\$ 599
10 Energy Production (MWh)	4.0	3.8	4.0	3.9	4.0	3.9	4.0	4.0	3.9	4.0	3.9	4.0
11 Operation and Maintenance	\$ 195	\$ 195	\$ 195	\$ 195	\$ 195	\$ 195	\$ 195	\$ 195	\$ 195	\$ 195	\$ 195	\$ 195
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 1,101	\$ 1,095	\$ 1,089	\$ 1,083	\$ 1,078	\$ 1,072	\$ 1,067	\$ 1,061	\$ 1,055	\$ 1,050	\$ 1,044	\$ 1,038

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Section Line	Jan-33	Feb-33	Mar-33	Apr-33	May-33	Jun-33	Jul-33	Aug-33	Sep-33	Oct-33	Nov-33	Dec-33
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 168,164	\$ 169,024	\$ 169,885	\$ 170,745	\$ 171,605	\$ 172,465	\$ 173,325	\$ 174,185	\$ 175,046	\$ 175,906	\$ 176,766	\$ 177,626
4 Net Plant	\$ 89,888	\$ 89,028	\$ 88,168	\$ 87,308	\$ 86,448	\$ 85,587	\$ 84,727	\$ 83,867	\$ 83,007	\$ 82,147	\$ 81,287	\$ 80,426
5 Book Depreciation Rate	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 142,940	\$ 143,671	\$ 144,402	\$ 145,133	\$ 145,864	\$ 146,595	\$ 147,327	\$ 148,058	\$ 148,789	\$ 149,520	\$ 150,251	\$ 150,982
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 31,609	\$ 31,306	\$ 31,004	\$ 30,701	\$ 30,399	\$ 30,096	\$ 29,794	\$ 29,491	\$ 29,189	\$ 28,886	\$ 28,584	\$ 28,282
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements												
1 Net Plant	\$ 89,888	\$ 89,028	\$ 88,168	\$ 87,308	\$ 86,448	\$ 85,587	\$ 84,727	\$ 83,867	\$ 83,007	\$ 82,147	\$ 81,287	\$ 80,426
2 Less Accumulated Deferred Income Tax Liability	\$ 31,609	\$ 31,306	\$ 31,004	\$ 30,701	\$ 30,399	\$ 30,096	\$ 29,794	\$ 29,491	\$ 29,189	\$ 28,886	\$ 28,584	\$ 28,282
3 Rate Base	\$ 58,280	\$ 57,722	\$ 57,164	\$ 56,606	\$ 56,049	\$ 55,491	\$ 54,933	\$ 54,376	\$ 53,818	\$ 53,260	\$ 52,703	\$ 52,145
4 Average Rate Base	\$ 58,558	\$ 58,001	\$ 57,443	\$ 56,885	\$ 56,328	\$ 55,770	\$ 55,212	\$ 54,654	\$ 54,097	\$ 53,539	\$ 52,981	\$ 52,424
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 275	\$ 272	\$ 270	\$ 267	\$ 264	\$ 262	\$ 259	\$ 257	\$ 254	\$ 251	\$ 249	\$ 246
7 Income Tax Component	\$ 194	\$ 192	\$ 190	\$ 188	\$ 187	\$ 185	\$ 183	\$ 181	\$ 179	\$ 177	\$ 176	\$ 174
8 Interest Expense Component	\$ 124	\$ 123	\$ 122	\$ 120	\$ 119	\$ 118	\$ 117	\$ 116	\$ 115	\$ 113	\$ 112	\$ 111
9 Total Return on Average Rate Base	\$ 593	\$ 587	\$ 582	\$ 576	\$ 570	\$ 565	\$ 559	\$ 553	\$ 548	\$ 542	\$ 536	\$ 531
10 Energy Production (MWh)	4.0	3.6	4.0	3.9	4.0	3.9	4.0	4.0	3.9	4.0	3.9	4.0
11 Operation and Maintenance	\$ 201	\$ 201	\$ 201	\$ 201	\$ 201	\$ 201	\$ 201	\$ 201	\$ 201	\$ 201	\$ 201	\$ 201
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 4	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 1,039	\$ 1,032	\$ 1,027	\$ 1,021	\$ 1,016	\$ 1,010	\$ 1,005	\$ 999	\$ 993	\$ 988	\$ 982	\$ 976

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Section Line	Jan-34	Feb-34	Mar-34	Apr-34	May-34	Jun-34	Jul-34	Aug-34	Sep-34	Oct-34	Nov-34	Dec-34
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 178,486	\$ 179,347	\$ 180,207	\$ 181,067	\$ 181,927	\$ 182,787	\$ 183,647	\$ 184,508	\$ 185,368	\$ 186,228	\$ 187,088	\$ 187,948
4 Net Plant	\$ 79,566	\$ 78,706	\$ 77,846	\$ 76,986	\$ 76,126	\$ 75,265	\$ 74,405	\$ 73,545	\$ 72,685	\$ 71,825	\$ 70,964	\$ 70,104
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 151,713	\$ 152,445	\$ 153,176	\$ 153,907	\$ 154,638	\$ 155,369	\$ 156,100	\$ 156,831	\$ 157,563	\$ 158,294	\$ 159,025	\$ 159,756
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 27,979	\$ 27,677	\$ 27,374	\$ 27,072	\$ 26,769	\$ 26,467	\$ 26,164	\$ 25,862	\$ 25,559	\$ 25,257	\$ 24,954	\$ 24,652
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements												
1 Net Plant	\$ 79,566	\$ 78,706	\$ 77,846	\$ 76,986	\$ 76,126	\$ 75,265	\$ 74,405	\$ 73,545	\$ 72,685	\$ 71,825	\$ 70,964	\$ 70,104
2 Less Accumulated Deferred Income Tax Liability	\$ 27,979	\$ 27,677	\$ 27,374	\$ 27,072	\$ 26,769	\$ 26,467	\$ 26,164	\$ 25,862	\$ 25,559	\$ 25,257	\$ 24,954	\$ 24,652
3 Rate Base	\$ 51,587	\$ 51,029	\$ 50,472	\$ 49,914	\$ 49,356	\$ 48,799	\$ 48,241	\$ 47,683	\$ 47,126	\$ 46,568	\$ 46,010	\$ 45,452
4 Average Rate Base	\$ 51,866	\$ 51,308	\$ 50,751	\$ 50,193	\$ 49,635	\$ 49,078	\$ 48,520	\$ 47,962	\$ 47,404	\$ 46,847	\$ 46,289	\$ 45,731
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 244	\$ 241	\$ 238	\$ 236	\$ 233	\$ 230	\$ 228	\$ 225	\$ 223	\$ 220	\$ 217	\$ 215
7 Income Tax Component	\$ 172	\$ 170	\$ 168	\$ 166	\$ 164	\$ 163	\$ 161	\$ 159	\$ 157	\$ 155	\$ 153	\$ 152
8 Interest Expense Component	\$ 110	\$ 109	\$ 107	\$ 106	\$ 105	\$ 104	\$ 103	\$ 102	\$ 100	\$ 99	\$ 98	\$ 97
9 Total Return on Average Rate Base	\$ 525	\$ 519	\$ 514	\$ 508	\$ 503	\$ 497	\$ 491	\$ 486	\$ 480	\$ 474	\$ 469	\$ 463
10 Energy Production (MWh)	4.0	3.6	4.0	3.9	4.0	3.9	4.0	4.0	3.9	4.0	3.8	4.0
11 Operation and Maintenance	\$ 207	\$ 207	\$ 207	\$ 207	\$ 207	\$ 207	\$ 207	\$ 207	\$ 207	\$ 207	\$ 207	\$ 207
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 4	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 977	\$ 971	\$ 966	\$ 960	\$ 954	\$ 948	\$ 943	\$ 937	\$ 931	\$ 926	\$ 920	\$ 915

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Section Line	Jan-35	Feb-35	Mar-35	Apr-35	May-35	Jun-35	Jul-35	Aug-35	Sep-35	Oct-35	Nov-35	Dec-35
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 188,808	\$ 189,669	\$ 190,529	\$ 191,389	\$ 192,249	\$ 193,109	\$ 193,970	\$ 194,830	\$ 195,690	\$ 196,550	\$ 197,410	\$ 198,270
4 Net Plant	\$ 69,244	\$ 68,384	\$ 67,524	\$ 66,664	\$ 65,803	\$ 64,943	\$ 64,083	\$ 63,223	\$ 62,363	\$ 61,503	\$ 60,642	\$ 59,782
5 Book Depreciation Rate	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 160,487	\$ 161,218	\$ 161,949	\$ 162,681	\$ 163,412	\$ 164,143	\$ 164,874	\$ 165,605	\$ 166,336	\$ 167,068	\$ 167,799	\$ 168,530
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 24,349	\$ 24,047	\$ 23,744	\$ 23,442	\$ 23,139	\$ 22,837	\$ 22,534	\$ 22,232	\$ 21,930	\$ 21,627	\$ 21,325	\$ 21,022
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements												
1 Net Plant	\$ 69,244	\$ 68,384	\$ 67,524	\$ 66,664	\$ 65,803	\$ 64,943	\$ 64,083	\$ 63,223	\$ 62,363	\$ 61,503	\$ 60,642	\$ 59,782
2 Less Accumulated Deferred Income Tax Liability	\$ 24,349	\$ 24,047	\$ 23,744	\$ 23,442	\$ 23,139	\$ 22,837	\$ 22,534	\$ 22,232	\$ 21,930	\$ 21,627	\$ 21,325	\$ 21,022
3 Rate Base	\$ 44,895	\$ 44,337	\$ 43,779	\$ 43,222	\$ 42,664	\$ 42,106	\$ 41,549	\$ 40,991	\$ 40,433	\$ 39,875	\$ 39,318	\$ 38,760
4 Average Rate Base	\$ 45,174	\$ 44,616	\$ 44,058	\$ 43,501	\$ 42,943	\$ 42,385	\$ 41,827	\$ 41,270	\$ 40,712	\$ 40,154	\$ 39,597	\$ 39,039
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 212	\$ 209	\$ 207	\$ 204	\$ 202	\$ 199	\$ 196	\$ 194	\$ 191	\$ 189	\$ 186	\$ 183
7 Income Tax Component	\$ 150	\$ 148	\$ 146	\$ 144	\$ 142	\$ 140	\$ 139	\$ 137	\$ 135	\$ 133	\$ 131	\$ 129
8 Interest Expense Component	\$ 96	\$ 94	\$ 93	\$ 92	\$ 91	\$ 90	\$ 89	\$ 87	\$ 86	\$ 85	\$ 84	\$ 83
9 Total Return on Average Rate Base	\$ 457	\$ 452	\$ 446	\$ 440	\$ 435	\$ 429	\$ 424	\$ 418	\$ 412	\$ 407	\$ 401	\$ 395
10 Energy Production (MWh)	4.0	3.6	4.0	3.8	4.0	3.8	4.0	4.0	3.8	4.0	3.8	4.0
11 Operation and Maintenance	\$ 213	\$ 213	\$ 213	\$ 213	\$ 213	\$ 213	\$ 213	\$ 213	\$ 213	\$ 213	\$ 213	\$ 213
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 4	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 915	\$ 909	\$ 904	\$ 898	\$ 893	\$ 887	\$ 881	\$ 876	\$ 870	\$ 864	\$ 859	\$ 853

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Section Line	Jan-36	Feb-36	Mar-36	Apr-36	May-36	Jun-36	Jul-36	Aug-36	Sep-36	Oct-36	Nov-36	Dec-36
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 199,131	\$ 199,991	\$ 200,851	\$ 201,711	\$ 202,571	\$ 203,431	\$ 204,292	\$ 205,152	\$ 206,012	\$ 206,872	\$ 207,732	\$ 208,593
4 Net Plant	\$ 58,922	\$ 58,062	\$ 57,202	\$ 56,341	\$ 55,481	\$ 54,621	\$ 53,761	\$ 52,901	\$ 52,041	\$ 51,180	\$ 50,320	\$ 49,460
5 Book Depreciation Rate	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 169,261	\$ 169,992	\$ 170,723	\$ 171,454	\$ 172,186	\$ 172,917	\$ 173,648	\$ 174,379	\$ 175,110	\$ 175,841	\$ 176,572	\$ 177,304
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 20,720	\$ 20,417	\$ 20,115	\$ 19,812	\$ 19,510	\$ 19,207	\$ 18,905	\$ 18,602	\$ 18,300	\$ 17,997	\$ 17,695	\$ 17,392
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements												
1 Net Plant	\$ 58,922	\$ 58,062	\$ 57,202	\$ 56,341	\$ 55,481	\$ 54,621	\$ 53,761	\$ 52,901	\$ 52,041	\$ 51,180	\$ 50,320	\$ 49,460
2 Less Accumulated Deferred Income Tax Liability	\$ 20,720	\$ 20,417	\$ 20,115	\$ 19,812	\$ 19,510	\$ 19,207	\$ 18,905	\$ 18,602	\$ 18,300	\$ 17,997	\$ 17,695	\$ 17,392
3 Rate Base	\$ 38,202	\$ 37,645	\$ 37,087	\$ 36,529	\$ 35,972	\$ 35,414	\$ 34,856	\$ 34,298	\$ 33,741	\$ 33,183	\$ 32,625	\$ 32,068
4 Average Rate Base	\$ 38,481	\$ 37,924	\$ 37,366	\$ 36,808	\$ 36,250	\$ 35,693	\$ 35,135	\$ 34,577	\$ 34,020	\$ 33,462	\$ 32,904	\$ 32,347
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 181	\$ 178	\$ 175	\$ 173	\$ 170	\$ 168	\$ 165	\$ 162	\$ 160	\$ 157	\$ 154	\$ 152
7 Income Tax Component	\$ 127	\$ 126	\$ 124	\$ 122	\$ 120	\$ 118	\$ 116	\$ 115	\$ 113	\$ 111	\$ 109	\$ 107
8 Interest Expense Component	\$ 81	\$ 80	\$ 79	\$ 78	\$ 77	\$ 76	\$ 74	\$ 73	\$ 72	\$ 71	\$ 70	\$ 68
9 Total Return on Average Rate Base	\$ 390	\$ 384	\$ 378	\$ 373	\$ 367	\$ 361	\$ 356	\$ 350	\$ 344	\$ 339	\$ 333	\$ 328
10 Energy Production (MWh)	4.0	3.7	4.0	3.8	4.0	3.8	4.0	4.0	3.8	3.9	3.8	3.9
11 Operation and Maintenance	\$ 219	\$ 219	\$ 219	\$ 219	\$ 219	\$ 219	\$ 219	\$ 219	\$ 219	\$ 219	\$ 219	\$ 219
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 4	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 854	\$ 848	\$ 843	\$ 837	\$ 831	\$ 825	\$ 820	\$ 814	\$ 808	\$ 803	\$ 797	\$ 792

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Section Line	Jan-37	Feb-37	Mar-37	Apr-37	May-37	Jun-37	Jul-37	Aug-37	Sep-37	Oct-37	Nov-37	Dec-37
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 209,453	\$ 210,313	\$ 211,173	\$ 212,033	\$ 212,893	\$ 213,754	\$ 214,614	\$ 215,474	\$ 216,334	\$ 217,194	\$ 218,054	\$ 218,915
4 Net Plant	\$ 48,600	\$ 47,740	\$ 46,880	\$ 46,019	\$ 45,159	\$ 44,299	\$ 43,439	\$ 42,579	\$ 41,719	\$ 40,858	\$ 39,998	\$ 39,138
5 Book Depreciation Rate	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%	0.3333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 178,035	\$ 178,766	\$ 179,497	\$ 180,228	\$ 180,959	\$ 181,691	\$ 182,422	\$ 183,153	\$ 183,884	\$ 184,615	\$ 185,346	\$ 186,077
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 17,090	\$ 16,787	\$ 16,485	\$ 16,182	\$ 15,880	\$ 15,578	\$ 15,275	\$ 14,973	\$ 14,670	\$ 14,368	\$ 14,065	\$ 13,763
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements												
1 Net Plant	\$ 48,600	\$ 47,740	\$ 46,880	\$ 46,019	\$ 45,159	\$ 44,299	\$ 43,439	\$ 42,579	\$ 41,719	\$ 40,858	\$ 39,998	\$ 39,138
2 Less Accumulated Deferred Income Tax Liability	\$ 17,090	\$ 16,787	\$ 16,485	\$ 16,182	\$ 15,880	\$ 15,578	\$ 15,275	\$ 14,973	\$ 14,670	\$ 14,368	\$ 14,065	\$ 13,763
3 Rate Base	\$ 31,510	\$ 30,952	\$ 30,395	\$ 29,837	\$ 29,279	\$ 28,721	\$ 28,164	\$ 27,606	\$ 27,048	\$ 26,491	\$ 25,933	\$ 25,375
4 Average Rate Base	\$ 31,789	\$ 31,231	\$ 30,673	\$ 30,116	\$ 29,558	\$ 29,000	\$ 28,443	\$ 27,885	\$ 27,327	\$ 26,770	\$ 26,212	\$ 25,654
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 149	\$ 147	\$ 144	\$ 141	\$ 139	\$ 136	\$ 134	\$ 131	\$ 128	\$ 126	\$ 123	\$ 120
7 Income Tax Component	\$ 105	\$ 103	\$ 102	\$ 100	\$ 98	\$ 96	\$ 94	\$ 92	\$ 91	\$ 89	\$ 87	\$ 85
8 Interest Expense Component	\$ 67	\$ 66	\$ 65	\$ 64	\$ 63	\$ 61	\$ 60	\$ 59	\$ 58	\$ 57	\$ 55	\$ 54
9 Total Return on Average Rate Base	\$ 322	\$ 316	\$ 311	\$ 305	\$ 299	\$ 294	\$ 288	\$ 282	\$ 277	\$ 271	\$ 265	\$ 260
10 Energy Production (MWh)	3.9	3.6	3.9	3.8	3.9	3.8	3.9	3.9	3.8	3.9	3.8	3.9
11 Operation and Maintenance	\$ 226	\$ 226	\$ 226	\$ 226	\$ 226	\$ 226	\$ 226	\$ 226	\$ 226	\$ 226	\$ 226	\$ 226
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 4	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 793	\$ 787	\$ 781	\$ 776	\$ 770	\$ 764	\$ 759	\$ 753	\$ 747	\$ 742	\$ 736	\$ 730

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Section Line	Jan-38	Feb-38	Mar-38	Apr-38	May-38	Jun-38	Jul-38	Aug-38	Sep-38	Oct-38	Nov-38	Dec-38
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 219,775	\$ 220,635	\$ 221,495	\$ 222,355	\$ 223,215	\$ 224,076	\$ 224,936	\$ 225,796	\$ 226,656	\$ 227,516	\$ 228,377	\$ 229,237
4 Net Plant	\$ 38,278	\$ 37,418	\$ 36,557	\$ 35,697	\$ 34,837	\$ 33,977	\$ 33,117	\$ 32,257	\$ 31,396	\$ 30,536	\$ 29,676	\$ 28,816
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 186,809	\$ 187,540	\$ 188,271	\$ 189,002	\$ 189,733	\$ 190,464	\$ 191,195	\$ 191,927	\$ 192,658	\$ 193,389	\$ 194,120	\$ 194,851
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 13,460	\$ 13,158	\$ 12,855	\$ 12,553	\$ 12,250	\$ 11,948	\$ 11,645	\$ 11,343	\$ 11,040	\$ 10,738	\$ 10,435	\$ 10,133
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements												
1 Net Plant	\$ 38,278	\$ 37,418	\$ 36,557	\$ 35,697	\$ 34,837	\$ 33,977	\$ 33,117	\$ 32,257	\$ 31,396	\$ 30,536	\$ 29,676	\$ 28,816
2 Less Accumulated Deferred Income Tax Liability	\$ 13,460	\$ 13,158	\$ 12,855	\$ 12,553	\$ 12,250	\$ 11,948	\$ 11,645	\$ 11,343	\$ 11,040	\$ 10,738	\$ 10,435	\$ 10,133
3 Rate Base	\$ 24,818	\$ 24,260	\$ 23,702	\$ 23,145	\$ 22,587	\$ 22,029	\$ 21,471	\$ 20,914	\$ 20,356	\$ 19,798	\$ 19,241	\$ 18,683
4 Average Rate Base	\$ 25,096	\$ 24,539	\$ 23,981	\$ 23,423	\$ 22,866	\$ 22,308	\$ 21,750	\$ 21,193	\$ 20,635	\$ 20,077	\$ 19,519	\$ 18,962
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 118	\$ 115	\$ 113	\$ 110	\$ 107	\$ 105	\$ 102	\$ 100	\$ 97	\$ 94	\$ 92	\$ 89
7 Income Tax Component	\$ 83	\$ 81	\$ 79	\$ 78	\$ 76	\$ 74	\$ 72	\$ 70	\$ 68	\$ 67	\$ 65	\$ 63
8 Interest Expense Component	\$ 53	\$ 52	\$ 51	\$ 50	\$ 48	\$ 47	\$ 46	\$ 45	\$ 44	\$ 42	\$ 41	\$ 40
9 Total Return on Average Rate Base	\$ 254	\$ 248	\$ 243	\$ 237	\$ 232	\$ 226	\$ 220	\$ 215	\$ 209	\$ 203	\$ 198	\$ 192
10 Energy Production (MWh)	3.9	3.5	3.9	3.8	3.9	3.8	3.9	3.9	3.8	3.9	3.8	3.9
11 Operation and Maintenance	\$ 233	\$ 233	\$ 233	\$ 233	\$ 233	\$ 233	\$ 233	\$ 233	\$ 233	\$ 233	\$ 233	\$ 233
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 4	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 732	\$ 726	\$ 720	\$ 715	\$ 709	\$ 703	\$ 698	\$ 692	\$ 686	\$ 681	\$ 675	\$ 669

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Section Line	Jan-39	Feb-39	Mar-39	Apr-39	May-39	Jun-39	Jul-39	Aug-39	Sep-39	Oct-39	Nov-39	Dec-39
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 230,097	\$ 230,957	\$ 231,817	\$ 232,677	\$ 233,538	\$ 234,398	\$ 235,258	\$ 236,118	\$ 236,978	\$ 237,838	\$ 238,699	\$ 239,559
4 Net Plant	\$ 27,956	\$ 27,096	\$ 26,235	\$ 25,375	\$ 24,515	\$ 23,655	\$ 22,795	\$ 21,934	\$ 21,074	\$ 20,214	\$ 19,354	\$ 18,494
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 195,582	\$ 196,314	\$ 197,045	\$ 197,776	\$ 198,507	\$ 199,238	\$ 199,969	\$ 200,700	\$ 201,432	\$ 202,163	\$ 202,894	\$ 203,625
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 9,830	\$ 9,528	\$ 9,226	\$ 8,923	\$ 8,621	\$ 8,318	\$ 8,016	\$ 7,713	\$ 7,411	\$ 7,108	\$ 6,806	\$ 6,503
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements												
1 Net Plant	\$ 27,956	\$ 27,096	\$ 26,235	\$ 25,375	\$ 24,515	\$ 23,655	\$ 22,795	\$ 21,934	\$ 21,074	\$ 20,214	\$ 19,354	\$ 18,494
2 Less Accumulated Deferred Income Tax Liability	\$ 9,830	\$ 9,528	\$ 9,226	\$ 8,923	\$ 8,621	\$ 8,318	\$ 8,016	\$ 7,713	\$ 7,411	\$ 7,108	\$ 6,806	\$ 6,503
3 Rate Base	\$ 18,125	\$ 17,568	\$ 17,010	\$ 16,452	\$ 15,894	\$ 15,337	\$ 14,779	\$ 14,221	\$ 13,664	\$ 13,106	\$ 12,548	\$ 11,991
4 Average Rate Base	\$ 18,404	\$ 17,846	\$ 17,289	\$ 16,731	\$ 16,173	\$ 15,616	\$ 15,058	\$ 14,500	\$ 13,942	\$ 13,385	\$ 12,827	\$ 12,269
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 86	\$ 84	\$ 81	\$ 79	\$ 76	\$ 73	\$ 71	\$ 68	\$ 65	\$ 63	\$ 60	\$ 58
7 Income Tax Component	\$ 61	\$ 59	\$ 57	\$ 55	\$ 54	\$ 52	\$ 50	\$ 48	\$ 46	\$ 44	\$ 42	\$ 41
8 Interest Expense Component	\$ 39	\$ 38	\$ 37	\$ 35	\$ 34	\$ 33	\$ 32	\$ 31	\$ 30	\$ 28	\$ 27	\$ 26
9 Total Return on Average Rate Base	\$ 186	\$ 181	\$ 175	\$ 169	\$ 164	\$ 158	\$ 152	\$ 147	\$ 141	\$ 136	\$ 130	\$ 124
10 Energy Production (MWh)	3.9	3.5	3.9	3.8	3.9	3.8	3.9	3.9	3.8	3.9	3.8	3.9
11 Operation and Maintenance	\$ 240	\$ 240	\$ 240	\$ 240	\$ 240	\$ 240	\$ 240	\$ 240	\$ 240	\$ 240	\$ 240	\$ 240
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 4	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 671	\$ 665	\$ 660	\$ 654	\$ 648	\$ 642	\$ 637	\$ 631	\$ 625	\$ 620	\$ 614	\$ 609

Minnesota Power
Renewable Resources Rider: 2020 Solar Facotr Filing
Community Solar Garden: Approved Revenue Requirement Project 108053 1/

108053 - In Service 10/1/2016

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Section Line	Jan-40	Feb-40	Mar-40	Apr-40	May-40	Jun-40	Jul-40	Aug-40	Sep-40	Oct-40	Nov-40	Dec-40
A Book Basis of Property												
1 CWIP												
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 240,419	\$ 241,279	\$ 242,139	\$ 243,000	\$ 243,860	\$ 244,720	\$ 245,580	\$ 246,440	\$ 247,300	\$ 248,161	\$ 249,021	\$ 249,881
4 Net Plant	\$ 17,634	\$ 16,773	\$ 15,913	\$ 15,053	\$ 14,193	\$ 13,333	\$ 12,473	\$ 11,612	\$ 10,752	\$ 9,892	\$ 9,032	\$ 8,172
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property												
1 Investment Tax Credit												
2 Reduction to Book and Tax Basis												
3 Adjusted Book and Tax Basis for Deferred Taxes												
4 Bonus Depreciation												
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 204,356	\$ 205,087	\$ 205,818	\$ 206,550	\$ 207,281	\$ 208,012	\$ 208,743	\$ 209,474	\$ 210,205	\$ 210,936	\$ 211,668	\$ 212,399
9 Tax Depreciation Rate												
10 Total Tax Depreciation												
11 Accumulated Tax Depreciation												
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 6,201	\$ 5,898	\$ 5,596	\$ 5,293	\$ 4,991	\$ 4,688	\$ 4,386	\$ 4,083	\$ 3,781	\$ 3,478	\$ 3,176	\$ 2,874
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements												
1 Net Plant	\$ 17,634	\$ 16,773	\$ 15,913	\$ 15,053	\$ 14,193	\$ 13,333	\$ 12,473	\$ 11,612	\$ 10,752	\$ 9,892	\$ 9,032	\$ 8,172
2 Less Accumulated Deferred Income Tax Liability	\$ 6,201	\$ 5,898	\$ 5,596	\$ 5,293	\$ 4,991	\$ 4,688	\$ 4,386	\$ 4,083	\$ 3,781	\$ 3,478	\$ 3,176	\$ 2,874
3 Rate Base	\$ 11,433	\$ 10,875	\$ 10,317	\$ 9,760	\$ 9,202	\$ 8,644	\$ 8,087	\$ 7,529	\$ 6,971	\$ 6,414	\$ 5,856	\$ 5,298
4 Average Rate Base	\$ 11,712	\$ 11,154	\$ 10,596	\$ 10,039	\$ 9,481	\$ 8,923	\$ 8,365	\$ 7,808	\$ 7,250	\$ 6,692	\$ 6,135	\$ 5,577
5 Current Return on CWIP												
6 After Tax Return on Equity	\$ 55	\$ 52	\$ 50	\$ 47	\$ 45	\$ 42	\$ 39	\$ 37	\$ 34	\$ 31	\$ 29	\$ 26
7 Income Tax Component	\$ 39	\$ 37	\$ 35	\$ 33	\$ 31	\$ 30	\$ 28	\$ 26	\$ 24	\$ 22	\$ 20	\$ 18
8 Interest Expense Component	\$ 25	\$ 24	\$ 22	\$ 21	\$ 20	\$ 19	\$ 18	\$ 17	\$ 15	\$ 14	\$ 13	\$ 12
9 Total Return on Average Rate Base	\$ 119	\$ 113	\$ 107	\$ 102	\$ 96	\$ 90	\$ 85	\$ 79	\$ 73	\$ 68	\$ 62	\$ 56
10 Energy Production (MWh)	3.9	3.6	3.9	3.8	3.9	3.8	3.9	3.9	3.8	3.9	3.7	3.9
11 Operation and Maintenance	\$ 247	\$ 247	\$ 247	\$ 247	\$ 247	\$ 247	\$ 247	\$ 247	\$ 247	\$ 247	\$ 247	\$ 247
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 4	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 4	\$ 5
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 610	\$ 604	\$ 599	\$ 593	\$ 588	\$ 582	\$ 576	\$ 571	\$ 565	\$ 559	\$ 554	\$ 548

Minnesota Power
Renewable Resources Rider: 2020 Solar Facotr Filing
Community Solar Garden: Approved Revenue Requirement Project 108053 1/

108053 - In Service 10/1/2016

Section Line	Jan-41	Feb-41	Mar-41	Apr-41	May-41	Jun-41	Jul-41	Aug-41	Sep-41
A Book Basis of Property									
1 CWIP									
2 Plant in Service	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053	\$ 258,053
3 Accumulated Depreciation	\$ 250,741	\$ 251,601	\$ 252,461	\$ 253,322	\$ 254,182	\$ 255,042	\$ 255,902	\$ 256,762	\$ 257,622
4 Net Plant	\$ 7,311	\$ 6,451	\$ 5,591	\$ 4,731	\$ 3,871	\$ 3,011	\$ 2,150	\$ 1,290	\$ 430
5 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
6 Total Depreciation	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
B Tax Basis of Property									
1 Investment Tax Credit									
2 Reduction to Book and Tax Basis									
3 Adjusted Book and Tax Basis for Deferred Taxes									
4 Bonus Depreciation									
5 Net Depreciable Plant	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672	\$ 109,672
6 Book Depreciation Rate	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%	0.333%
7 Book Style Depreciation for Deferred Taxes	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731	\$ 731
8 Accumulated Book Depreciation	\$ 213,130	\$ 213,861	\$ 214,592	\$ 215,323	\$ 216,055	\$ 216,786	\$ 217,517	\$ 218,248	\$ 218,979
9 Tax Depreciation Rate									
10 Total Tax Depreciation									
11 Accumulated Tax Depreciation									
12 Tax/Book Depreciation Difference	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)	\$ (731)
13 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
14 Deferred Income Tax Expense - debit (credit)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)	\$ (302)
15 Accumulated Deferred Income Tax	\$ 2,571	\$ 2,269	\$ 1,966	\$ 1,664	\$ 1,361	\$ 1,059	\$ 756	\$ 454	\$ 151
16 Amortization of Investment Tax Credit	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363	\$ 363
17 Gross-up of Amortized Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
C Revenue Requirements									
1 Net Plant	\$ 7,311	\$ 6,451	\$ 5,591	\$ 4,731	\$ 3,871	\$ 3,011	\$ 2,150	\$ 1,290	\$ 430
2 Less Accumulated Deferred Income Tax Liability	\$ 2,571	\$ 2,269	\$ 1,966	\$ 1,664	\$ 1,361	\$ 1,059	\$ 756	\$ 454	\$ 151
3 Rate Base	\$ 4,740	\$ 4,183	\$ 3,625	\$ 3,067	\$ 2,510	\$ 1,952	\$ 1,394	\$ 837	\$ 279
4 Average Rate Base	\$ 5,019	\$ 4,462	\$ 3,904	\$ 3,346	\$ 2,788	\$ 2,231	\$ 1,673	\$ 1,115	\$ 558
5 Current Return on CWIP									
6 After Tax Return on Equity	\$ 24	\$ 21	\$ 18	\$ 16	\$ 13	\$ 10	\$ 8	\$ 5	\$ 3
7 Income Tax Component	\$ 17	\$ 15	\$ 13	\$ 11	\$ 9	\$ 7	\$ 6	\$ 4	\$ 2
8 Interest Expense Component	\$ 11	\$ 9	\$ 8	\$ 7	\$ 6	\$ 5	\$ 4	\$ 2	\$ 1
9 Total Return on Average Rate Base	\$ 51	\$ 45	\$ 40	\$ 34	\$ 28	\$ 23	\$ 17	\$ 11	\$ 6
10 Energy Production (MWh)	3.9	3.5	3.9	3.7	3.9	3.7	3.9	3.9	3.7
11 Operation and Maintenance	\$ 254	\$ 254	\$ 254	\$ 254	\$ 254	\$ 254	\$ 254	\$ 254	\$ 254
12 Depreciation Expense	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860	\$ 860
13 MN Solar Production Tax	\$ 5	\$ 4	\$ 5	\$ 4	\$ 5	\$ 4	\$ 5	\$ 5	\$ 4
14 Investment Tax Credit	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620	\$ 620
15 Revenue Requirements	\$ 550	\$ 544	\$ 539	\$ 533	\$ 527	\$ 521	\$ 516	\$ 510	\$ 504

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden Approved Pricing per kWh 1/

Pricing per kWh

12-month period		1											
Section	Line	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
	Days in Month	31	29	31	30	31	30	31	31	30	31	30	31
	Hours of Production	24	24	24	24	24	24	24	24	24	24	24	24
A	kW Facility												
	1 Capacity Factor										15.0%	15.0%	15.0%
	2 kW Size										40	40	40
	3 Production (kWh)										4,464	4,320	4,464
	4 Revenue Requirements										\$ 1,620	\$ 3,092	\$ 3,056
	5 SREC Discount										\$ 9	\$ 9	\$ 9
	6 Net Revenue Requirements										\$ 1,611	\$ 3,084	\$ 3,047
	7 Monthly \$/kWh										\$ 0.36	\$ 0.71	\$ 0.68
B	PPA												
	1 Capacity Factor										20.6%	20.6%	20.6%
	2 kW Size										1,000	1,000	1,000
	3 Production (kWh)										153,216	148,274	153,216
	4 PPA Cost										\$ 15,858	\$ 15,346	\$ 15,858
	5 SREC Discount										\$ 306	\$ 297	\$ 306
	6 Net Revenue Requirements										\$ 15,551	\$ 15,050	\$ 15,551
	7 Monthly \$/kWh												
C	Total												
	1 Total Production	0	0	0	0	0	0	0	0	0	157,680	152,594	157,680
	2 Total Cost per Month	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,163	\$ 18,133	\$ 18,599
	3 Total Cost per kWh	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 0.1088	\$ 0.1188	\$ 0.1180
	4 Discount Rate										0.007		
	5 Present Value Production kWh										19,191,824		
	6 Present Value Cost per Month										\$ 2,139,487		
	7 Levelized Cost per kWh										0.1115		

1/ Refer to Minnesota Power's Supplemental Comments, 4/14/2016, Docket E015/M-15-825, Exhibit C, pages 4-6 for annual summary.

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden Approved Subscription Option Pricing 1/

Community Solar Garden - Subscription Options Pricing

Prices per 1 kW block

		1	2	3	4	5	6	7	8	9	10	11	12	13
<i>12-month Period</i>														
	Production (kWh)	1,785	1,771	1,757	1,749	1,731	1,719	1,706	1,698	1,681	1,668	1,656	1,648	1,631
	Present Value	19,126												
A	Option 1 - Upfront Payment													
	Subscription Cost	\$ 2,132.15												
	Levelized Price per kWh	\$ 0.1115												
	Total Cost per kW	\$199.01	\$197.39	\$195.92	\$195.00	\$193.02	\$191.59	\$190.16	\$189.27	\$187.35	\$185.96	\$184.57	\$183.70	\$181.84
	Present Value	\$ 2,132.15												
B	Option 2 - Monthly Subscription													
	Subscription Cost	\$ 15.62												
	Price per kWh	\$ 0.1115												
	Monthly Subscription	\$187.48	\$187.48	\$187.48	\$187.48	\$187.48	\$187.48	\$187.48	\$187.48	\$187.48	\$187.48	\$187.48	\$187.48	\$187.48
	Present Value	\$ 2,132.15												
C	Option 3 - Energy Subscription													
	Subscription Cost (\$/kWh)	\$ 0.1115												

1/ Refer to Minnesota Power's Supplemental Comments, 4/14/2016, Docket E015/M-15-825, Exhibit C, pages 2-3 and to MP's Rate Book, page 97.

Minnesota Power
Renewable Resources Rider: 2020 Solar Factor Filing
Community Solar Garden: Approved Amortization Schedule Option 1

Month	1	2	3	4	5	6	7	8	9	10	11	12
Subscription Price	\$2,132.15	\$2,125.04	\$2,117.94	\$2,110.83	\$2,103.72	\$2,096.61	\$2,089.51	\$2,082.40	\$2,075.29	\$2,068.19	\$2,061.08	\$2,053.97
Month	13	14	15	16	17	18	19	20	21	22	23	24
Subscription Price	\$2,046.86	\$2,039.76	\$2,032.65	\$2,025.54	\$2,018.44	\$2,011.33	\$2,004.22	\$1,997.11	\$1,990.01	\$1,982.90	\$1,975.79	\$1,968.69
Month	25	26	27	28	29	30	31	32	33	34	35	36
Subscription Price	\$1,961.58	\$1,954.47	\$1,947.36	\$1,940.26	\$1,933.15	\$1,926.04	\$1,918.94	\$1,911.83	\$1,904.72	\$1,897.61	\$1,890.51	\$1,883.40
Month	37	38	39	40	41	42	43	44	45	46	47	48
Subscription Price	\$1,876.29	\$1,869.18	\$1,862.08	\$1,854.97	\$1,847.86	\$1,840.76	\$1,833.65	\$1,826.54	\$1,819.43	\$1,812.33	\$1,805.22	\$1,798.11
Month	49	50	51	52	53	54	55	56	57	58	59	60
Subscription Price	\$1,791.01	\$1,783.90	\$1,776.79	\$1,769.68	\$1,762.58	\$1,755.47	\$1,748.36	\$1,741.26	\$1,734.15	\$1,727.04	\$1,719.93	\$1,712.83
Month	61	62	63	64	65	66	67	68	69	70	71	72
Subscription Price	\$1,705.72	\$1,698.61	\$1,691.51	\$1,684.40	\$1,677.29	\$1,670.18	\$1,663.08	\$1,655.97	\$1,648.86	\$1,641.76	\$1,634.65	\$1,627.54
Month	73	74	75	76	77	78	79	80	81	82	83	84
Subscription Price	\$1,620.43	\$1,613.33	\$1,606.22	\$1,599.11	\$1,592.01	\$1,584.90	\$1,577.79	\$1,570.68	\$1,563.58	\$1,556.47	\$1,549.36	\$1,542.26
Month	85	86	87	88	89	90	91	92	93	94	95	96
Subscription Price	\$1,535.15	\$1,528.04	\$1,520.93	\$1,513.83	\$1,506.72	\$1,499.61	\$1,492.51	\$1,485.40	\$1,478.29	\$1,471.18	\$1,464.08	\$1,456.97
Month	97	98	99	100	101	102	103	104	105	106	107	108
Subscription Price	\$1,449.86	\$1,442.75	\$1,435.65	\$1,428.54	\$1,421.43	\$1,414.33	\$1,407.22	\$1,400.11	\$1,393.00	\$1,385.90	\$1,378.79	\$1,371.68
Month	109	110	111	112	113	114	115	116	117	118	119	120
Subscription Price	\$1,364.58	\$1,357.47	\$1,350.36	\$1,343.25	\$1,336.15	\$1,329.04	\$1,321.93	\$1,314.83	\$1,307.72	\$1,300.61	\$1,293.50	\$1,286.40
Month	121	122	123	124	125	126	127	128	129	130	131	132
Subscription Price	\$1,279.29	\$1,272.18	\$1,265.08	\$1,257.97	\$1,250.86	\$1,243.75	\$1,236.65	\$1,229.54	\$1,222.43	\$1,215.33	\$1,208.22	\$1,201.11
Month	133	134	135	136	137	138	139	140	141	142	143	144
Subscription Price	\$1,194.00	\$1,186.90	\$1,179.79	\$1,172.68	\$1,165.58	\$1,158.47	\$1,151.36	\$1,144.25	\$1,137.15	\$1,130.04	\$1,122.93	\$1,115.83
Month	145	146	147	148	149	150	151	152	153	154	155	156
Subscription Price	\$1,108.72	\$1,101.61	\$1,094.50	\$1,087.40	\$1,080.29	\$1,073.18	\$1,066.08	\$1,058.97	\$1,051.86	\$1,044.75	\$1,037.65	\$1,030.54
Month	157	158	159	160	161	162	163	164	165	166	167	168
Subscription Price	\$1,023.43	\$1,016.32	\$1,009.22	\$1,002.11	\$ 995.00	\$ 987.90	\$ 980.79	\$ 973.68	\$ 966.57	\$ 959.47	\$ 952.36	\$ 945.25
Month	169	170	171	172	173	174	175	176	177	178	179	180
Subscription Price	\$ 938.15	\$ 931.04	\$ 923.93	\$ 916.82	\$ 909.72	\$ 902.61	\$ 895.50	\$ 888.40	\$ 881.29	\$ 874.18	\$ 867.07	\$ 859.97
Month	181	182	183	184	185	186	187	188	189	190	191	192
Subscription Price	\$ 852.86	\$ 845.75	\$ 838.65	\$ 831.54	\$ 824.43	\$ 817.32	\$ 810.22	\$ 803.11	\$ 796.00	\$ 788.90	\$ 781.79	\$ 774.68
Month	193	194	195	196	197	198	199	200	201	202	203	204
Subscription Price	\$ 767.57	\$ 760.47	\$ 753.36	\$ 746.25	\$ 739.15	\$ 732.04	\$ 724.93	\$ 717.82	\$ 710.72	\$ 703.61	\$ 696.50	\$ 689.40
Month	205	206	207	208	209	210	211	212	213	214	215	216
Subscription Price	\$ 682.29	\$ 675.18	\$ 668.07	\$ 660.97	\$ 653.86	\$ 646.75	\$ 639.65	\$ 632.54	\$ 625.43	\$ 618.32	\$ 611.22	\$ 604.11
Month	217	218	219	220	221	222	223	224	225	226	227	228
Subscription Price	\$ 597.00	\$ 589.89	\$ 582.79	\$ 575.68	\$ 568.57	\$ 561.47	\$ 554.36	\$ 547.25	\$ 540.14	\$ 533.04	\$ 525.93	\$ 518.82
Month	229	230	231	232	233	234	235	236	237	238	239	240
Subscription Price	\$ 511.72	\$ 504.61	\$ 497.50	\$ 490.39	\$ 483.29	\$ 476.18	\$ 469.07	\$ 461.97	\$ 454.86	\$ 447.75	\$ 440.64	\$ 433.54
Month	241	242	243	244	245	246	247	248	249	250	251	252
Subscription Price	\$ 426.43	\$ 419.32	\$ 412.22	\$ 405.11	\$ 398.00	\$ 390.89	\$ 383.79	\$ 376.68	\$ 369.57	\$ 362.47	\$ 355.36	\$ 348.25
Month	253	254	255	256	257	258	259	260	261	262	263	264
Subscription Price	\$ 341.14	\$ 334.04	\$ 326.93	\$ 319.82	\$ 312.72	\$ 305.61	\$ 298.50	\$ 291.39	\$ 284.29	\$ 277.18	\$ 270.07	\$ 262.97
Month	265	266	267	268	269	270	271	272	273	274	275	276
Subscription Price	\$ 255.86	\$ 248.75	\$ 241.64	\$ 234.54	\$ 227.43	\$ 220.32	\$ 213.22	\$ 206.11	\$ 199.00	\$ 191.89	\$ 184.79	\$ 177.68
Month	277	278	279	280	281	282	283	284	285	286	287	288
Subscription Price	\$ 170.57	\$ 163.46	\$ 156.36	\$ 149.25	\$ 142.14	\$ 135.04	\$ 127.93	\$ 120.82	\$ 113.71	\$ 106.61	\$ 99.50	\$ 92.39
Month	289	290	291	292	293	294	295	296	297	298	299	300
Subscription Price	\$ 85.29	\$ 78.18	\$ 71.07	\$ 63.96	\$ 56.86	\$ 49.75	\$ 42.64	\$ 35.54	\$ 28.43	\$ 21.32	\$ 14.21	\$ 7.11

1/ Refer to Minnesota Power's Supplemental Comments, 4/14/2016, Docket E015/M-15-825, Exhibit D, page 5, Section 8.5, Option 1 and MP's Rate Book, page 97.1, section

STATE OF MINNESOTA)
) ss
COUNTY OF ST. LOUIS)

AFFIDAVIT OF SERVICE VIA
ELECTRONIC FILING

Tiana Heger of the City of Duluth, County of St. Louis, State of Minnesota, says that on the 30th day of June, 2020, she served Minnesota Power's 2020 Solar Renewable Factor Initial Filing in **Docket No. E015/M-20-TBD** on the Minnesota Public Utilities Commission and the Energy Resources Division of the Minnesota Department of Commerce via electronic filing. The persons on E-Docket's Official Service List for this Docket were served as requested.



Tiana Heger