



December 14, 2018

—Via Electronic Filing—

Daniel P. Wolf Executive Secretary Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101

RE: IN THE MATTER OF THE PETITION OF NORTHERN STATES POWER COMPANY FOR APPROVAL OF UPDATES TO SOLAR*REWARDS AND COMMUNITY SOLAR GARDENS PROGRAM TARIFFS & TARIFF MODIFICATIONS IMPLEMENTING RULES ON COGENERATION AND SMALL POWER PRODUCTION DOCKET NOS. E002/M-13-1015 & E002/M-16-222

Dear Mr. Wolf:

Northern States Power Company, doing business as Xcel Energy, submits the attached tariff revisions as set forth in Attachment A to our Section 9 Tariff for our Solar*Rewards program tariff. These changes include those approved by the Deputy Commissioner's Decision filed on November 21, 2018 as well as clarification under our Net Metering Tariffs.

We have electronically filed this document with the Minnesota Public Utilities Commission, and copies have been served on the parties on the attached service list. Please contact Jessica Peterson at jessica.k.peterson@xcelenergy.com or (612) 330-6850 if you have any questions concerning this filing.

Sincerely,

/s/

SHAWN WHITE
MANAGER, DSM REGULATORY STRATEGY & PLANNING

Enclosures c: Service Lists

STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Nancy Lange Chair
Dan Lipschultz Commissioner
Matthew Schuerger Commissioner
Katie J. Sieben Commissioner
John A. Tuma Commissioner

IN THE MATTER OF THE PETITION OF NORTHERN STATES POWER COMPANY FOR APPROVAL OF UPDATES TO SOLAR*REWARDS TARIFFS DOCKET NO. E002/M-13-1015

TARIFF MODIFICATIONS IMPLEMENTING RULES ON COGENERATION AND SMALL POWER PRODUCTION

DOCKET NO. E002/M-16-222

PETITION

INTRODUCTION

Northern States Power Company, doing business as Xcel Energy, submits the attached tariff revisions as set forth in Attachment A to our Section 9 Tariff for our Solar*Rewards program tariffs. The Deputy Commissioner's Decision filed on November 21, 2018 ("Decision"), sets forth various changes to the 2019 Solar*Rewards program year, including adjustments for the production based incentive level, the addition of up-front incentives for low-income customers and certain consumer protection provisions.

In addition, we have included in this request: (1) a set of redlines to current tariffs which we propose for purposes of consistency with the Cogeneration and Small Power Production Tariffs; (2) general "clean-up" to our program tariffs; and, (3) a request to extend the 30-day negative check-off process to the Solar*Rewards third-generation tariffed contract proposed in this filing and the Solar*Rewards Contract for Those Receiving Solar*Rewards Incentive.

We request the Commission approve our proposed tariff changes and review this Petition in parallel with our separately submitted Petition in Docket No. E002/M-18-714. The petition in Docket No. E002/M-18-714 includes redline tariff changes

specific to implementing the *Minnesota Distribution Interconnection Process* (MN DIP) and *Minnesota Distribution Interconnection Agreement* (MN DIA). Since the Company is planning to deploy IT system changes and program process adjustments in an efficient and comprehensive way, and the Commission's simultaneous consideration of all proposed changes will enable these efforts in the most efficient and cost-effective way.

Specifically, we request that the Commission:

- Approve the proposed tariff changes necessary to implement the Deputy Commissioner's November 21, 2018 Decision;
- Approve further tariff changes made for consistency and "clean up" as itemized in this Petition;
- Approve a 30-day negative check-off process for approved amendments to the third-generation Solar*Rewards contract and the Solar*Rewards Contract for Those Receiving Solar*Rewards Incentive, and
- Consider in parallel this Petition with the Company's request filed contemporaneously in Docket No. 18-714.

I. SUMMARY OF FILING

A one-paragraph summary is attached to this filing pursuant to Minn. R. 7829.1300, subp. 1.

II. SERVICE ON OTHER PARTIES

Pursuant to Minn. R. 7829.1300, subp. 2, the Company has served a copy of this filing on the Office of the Attorney General – Antitrust and Utilities Division. A summary of the filing has been served on all parties on the enclosed service list.

III. GENERAL FILING INFORMATION

Pursuant to Minn. R. 7829.1300, subp. 3, the Company provides the following information.

A. Name, Address, and Telephone Number of Utility

Northern States Power Company, doing business as Xcel Energy 414 Nicollet Mall Minneapolis, MN 55401 (612) 330-5500

B. Name, Address, and Telephone Number of Utility Attorney

James Denniston Assistant General Counsel Xcel Energy 414 Nicollet Mall, 5th Floor Minneapolis, MN 55401 612-215-4656

C. Date of Filing

The date of this filing is December 14, 2018. The Company requests the Commission approve this Petition.

D. Statute Controlling Schedule for Processing the Filing

Minn. Stat. § 216B.16 subd. 1 requires a 60-day notice to the Commission of a proposed tariff change. Under the Commission's rules, the proposed tariff change discussed in this Petition falls within the definition of a miscellaneous tariff filing under Minn. R. 7829.0100, subp. 11, since no determination of Xcel Energy's general revenue requirement is necessary.

E. Utility Employee Responsible for Filing

Shawn White DSM Regulatory Manager Xcel Energy 414 Nicollet Mall, 401 – 6th Floor Minneapolis, MN 55401 612-330-6096

IV. MISCELLANEOUS INFORMATION

Pursuant to Minn. R. 7829.0700, the Company requests that the following persons be placed on the Commission's official service list for this proceeding:

James Denniston

Assistant General Counsel

Xcel Energy

414 Nicollet Mall, 401 – 8th Floor

Minneapolis, MN 55401

James.R.Denniston@xcelenergy.com

Lynette Sweet

Regulatory Administrator

Xcel Energy

414 Nicollet Mall, 401 – 7th Floor

Minneapolis, MN 55401

regulatory.records@xcelenergy.com

Any information requests in this proceeding should be submitted to the Regulatory Records email address above.

V. DESCRIPTION AND PURPOSE OF FILING

A. Background

In 2013, legislation was signed by Governor Dayton to require the Company to operate a performance-based solar incentive program beginning in 2014. The statute was amended during the 2017 legislative session expanding the program. The program is subject to review and approval by the Deputy Commissioner of the Minnesota Department of Commerce per legislation.

The Company adjusted the structure and content of its net metering tariff in Docket E002/M-16-222 beginning on July 21, 2017. The net metering tariff forms a foundation for the Solar*Rewards tariff as each Solar*Rewards participant must choose an applicable net metering rate code. Further, under the MN DIP, each Solar*Rewards customer subject to the MN DIP must also sign the Uniform Statewide Contract that applies the net metering tariff.

On June 29, 2018, the Company submitted its 2017 Annual Report of the Solar*Rewards program and concurrently submitted program changes for approval for the 2019 program year. These program changes included a low-income carve out, reduction in the production based incentive and the addition of customer protection for residential customers. On November 21, 2018, the Deputy Commissioner approved these changes with modifications.

B. Purpose of Filing

In this filing, the Company provides notice of a change to its business rules on how it determines the capacity of a Qualifying Facility (QF). This is discussed in the section immediately below. This filing also includes tariff changes pursuant to the Deputy Commissioner's Decision, and includes additional proposed tariff revisions. The tariff changes in this docket are noted below:

Minnesota Electric Rate Book

Section 9, Sheet 14	Section 9, Sheet 48.01-48.02
Section 9, Sheet 49.13-49.14	Section 9, Sheets 34-36
Section 9, Sheet 51-53	Section 9, Sheet 49.09
Section 9, Sheet 45	Section 9, Sheet 49.01-49.03
Section 9, Sheet 58	Section 9, Sheets 59.001
Section 9, Sheet 59.04	Section 9, Sheet 59.09
Section 9, Sheet 59.11	

We provide the redlined and clean tariff sheets as Attachment A to this filing and have included annotations to these changes in Attachment B. The redline tariff changes in the current docket are incremental to those changes in Docket No. 18-714, and where there are revisions from both dockets on the same tariff sheet the revisions from Docket No. 18-714 are noted in blue font for ease of reference.

C. Business Rules for Determining QF Capacity under Net Metering Rules

We recently received an inquiry from a customer that was seeking to have a 39 kW solar system, plus an additional 8 kW solar system at the same site, and asked whether each of these systems could qualify for our A55 or A56 rate code that only applies to QF systems above 40 kW and that also provides for a kWh banking. Under our net metering tariff, if a QF has less than a 40 kW (AC) capacity, it qualifies for our A50 net metering rate code. Our A55/56 net metering rate code only applies to systems of at least 40 kW AC capacity but less than 1,000 kW AC capacity.

In determining the correct approach, we decided to allow what this developer was proposing. We looked to how Qualified Facilities are defined by Minnesota Public Utilities Commission rules (Minn. R. 7835.0100) that points to 18 CFR, Part 292 which states in part, "... the power production capacity of a facility for which qualification is sought, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same

person(s) or its affiliates, and are located at the same site...."In applying this rule, we determined that the customer could choose the A55/56 rate code, and in fact would not be eligible for the A50 rate code for either system.

Consistent with this, upon the issuance of the Commission order in this proceeding, we intend to implement a business rule that looks at all facilities at the same site to determine net metering rate code availability. We intend to grandfather-in all previously approved net metering codes that are currently in place for a given installation, as long as the customer does not subsequently choose to change the applicable net metering rate code. Under this business rule, when a customer chooses to install a 39 kW Solar*Rewards system plus a 2+kW systems at same site so that the customer has 40 kW AC capacity or more at the same site (but less than 1,000 kW AC capacity), these projects by definition will be considered to be a single Qualified Facility and are no longer eligible for the A50 rate as defined in our tariff. Customers therefore will need to move to another net metering rate better suited to their project size. This business rule will not affect the eligibility for a Solar*Rewards incentive for a system up to 40 kW that is at the same site as another system that together exceed 40 kW. This business rule will only determine the eligibility for a particular net metering rate code.

D. Deputy Commissioner's Decision

1. Low-Income Carve Out

In his November 11, 2017 Decision, the Deputy Commissioner directed the Company to work with Department staff and low-income stakeholders to develop recommendations for the creation of a low-income sub-program as part of our Solar*Rewards program. As directed, the Company began discussions regarding a sub-program with Department staff and held three stakeholder discussions while developing a low-income carve out presented to the Department in our 2017 Annual Report.

Since June, the Company continued to work with additional parties to determine eligibility requirements and incentive requirements. The Company filed a Supplement including these details on September 25, 2018, and the Commissioner approved these eligibility requirements, with modification, in his 2018 Decision. We provide these eligibility requirements as part of our proposed tariff revisions to our Solar*Rewards Standard Contract and the Solar*Rewards Community with Solar*Rewards Incentives Standard Contract. We have included these in Attachment A.

2. Production Incentive Change

The Decision also approved the Company's request to lower the production incentive for applications subject to the Solar*Rewards 2019 program year based on segment: residential and commercial. The Deputy Commissioner also approved upfront incentives for the low-income segment for applications subject to the Solar*Rewards 2019 program year as noted below in Table 1.

Table 1: 2019 Solar*Rewards Program Year Production Incentives

		Production	Up-front
	Customer Category	Incentive per	Incentive
		kWH	\$/W
1	Residential Systems	\$0.07	N/A
2	Low-Income Residential	\$0.07	\$2.00
3	Low-Income Non-Profit and Multi-		
	family (serving low-income customers)	\$0.06	\$1.00
4	Low-Income Solar Garden	\$0.06	\$0.50
5	Commercial Systems (including		
	Solar*Rewards with Solar*Rewards	\$0.06	N/A
	Community Gardens)		

We provide these eligibility requirements as an exhibit to both our Solar*Rewards Standard Contract and the Solar*Rewards Community with Solar*Rewards Incentives Standard Contract.

3. Customer Protection

The Decision also adopted consumer protection provisions to add to the Solar*Rewards contract as described on page 14 of our Supplement filing in this docket on September 25, 2018. There we stated:

We propose a new provision in the Solar*Rewards tariff to require that applications submitted by an installer for residential properties may only be submitted by a Minnesota licensed residential building contractor. The Company will perform a compliance check for this once at the beginning of the application process. A residential customer need not have the developer submit the application, but may instead submit its own Solar*Rewards application in which case we will not check to determine whether the customer's installer is so licensed. We have worked with MNSEIA and various other developers to verify the need

for particular licenses and believe that there is general agreement with this new provision.

The Decision, at page 26, supports a requirement that in addition to meeting all other licensing requirements that contractors participating in the Solar*Rewards program hold a residential building contractor or remodeler license issued by the Department of Labor and Industry.

E. Additional Changes – Alignment Net Metering Tariffs

In order to align our tariff with current net metering requirements and the above-described business rules for determining net metering rate code eligibility, we have made additional tariff changes. We have adjusted our tariff at Section 9, Sheet 14, 34 and 49, to reflect new Rate Code options implemented in Docket No. 16-222 as reflected in the Section 9 Tariff, Sheets 2 through 4.3. The rate codes that should be available under the Solar*Rewards Contract are:

- A50 (Average Retail Rate) so long as the total distributed generation nameplate capacity at the service address is less than 40 kW (AC);
- A51/A52 (Sale to Company after Customer Self-Use, Non-TOD/TOD);
- A53/A54 (Monthly Net Metering, Non-TOD/TOD); and
- A55/A56 (Annual Net Metering, Non-TOD/TOD) where the total distributed generation nameplate at the service address is at least 40 kW but less than 1000 kW (AC).

The Company has added additional wording to the Tariff to clarify that any time after making an initial valid rate code selection, the customer can make a change to their selection to any available rate code by calling the Company or confirming the change through email communications with the Company. Additionally, the Company will notify the customer if they are no longer eligible for a particular rate based on the generation requirements by premise for the Rate Code selected.

E. 30-Day Negative Check-off

The Commission's September 25, 2015 Order in Docket No. E002/M-15-650 currently permits the Company to proceed with an amended Solar*Rewards Contract 32 days after it is filed with the Commission if all three of the following conditions are met:

- 1. The filing amends a first or second generation Solar*Rewards Contract;
- 2. The filing includes a red-lined version showing the charges to the standard contract; and

3. No objection or intent to object is filed within 30 days of the filing.

The Company requests that as part of this Petition the Commission allow for a 30-day negative check-off for our third-generation Solar*Rewards tariff and for the Solar*Rewards Contract for Those Receiving Solar*Rewards Incentive. This 30-day negative check-off process has been a successful practice and the program and customers will continue to benefit if approved for these additional tariffed contracts.

VI. EFFECT OF CHANGE UPON XCEL ENERGY REVENUE

No significant revenue effect net of incremental costs is expected. To the extent that the tariff revisions allow Xcel Energy to assess certain new or different fees, these are expected to be off-set by associated costs.

CONCLUSION

Xcel Energy respectfully requests that the Commission:

- Approve the proposed tariff changes necessary to implement the Deputy Commissioner's November 21, 2018 Decision;
- Approve further tariff changes made for consistency and "clean up" as itemized in this Petition;
- Approve a 30-day negative check-off process for approved amendments to the third-generation S*R contract and the Solar*Rewards Contract for Those Receiving Solar*Rewards Incentive, and
- Consider in parallel with this Petition the Company's request filed contemporaneously in Docket No. E002/M-18-714.

We respectfully request approval of the tariff changes proposed in this Petition.

Dated: December 14, 2018

Northern States Power Company

STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Nancy Lange Chair
Dan Lipschultz Commissioner
Matthew Schuerger Commissioner
Katie J. Sieben Commissioner
John A. Tuma Commissioner

IN THE MATTER OF THE PETITION OF NORTHERN STATES POWER COMPANY FOR APPROVAL OF UPDATES TO SOLAR*REWARDS AND COMMUNITY SOLAR GARDENS PROGRAM TARIFFS DOCKET NO. E002/M-13-1015

TARIFF MODIFICATIONS IMPLEMENTING
RULES ON COGENERATION AND
SMALL POWER PRODUCTION

DOCKET NO. E002/M-16-222

PETITION

SUMMARY OF FILING

Please take notice that on December 14, 2018, Northern States Power Company, doing business as Xcel Energy, filed with the Minnesota Public Utilities Commission a Petition for approval of tariff revisions in redline and final format, as shown in Attachment A, as set forth in the Deputy Commissioner's Decision filed on November 21, 2018 along with business rule changes for determining the capacity of a Qualifying Facility under our net metering tariff.

Docket No. E002/M-13-1015 Solar*Rewards Petition Attachment A

Redline

2. Purchases and Sales of Electricity.

Customer and Company agree:

- a. Company will sell electricity to Customer under the rate schedule in force for the class of customer to which Customer belongs.
- b. Customer agrees to supply electricity generated by the PV System in the form of ____ phase, ____ wire, alternating current at the nominal frequency of 60 hertz, and at a nominal voltage of ____.
- c. Company will buy electricity generated by the PV System from Customer under the applicable Company rate schedule filed with the Commission. Customer elects to sell electricity generated by the PV System in excess of Customer's own use under the terms of the following-Company tariff:Net Metering rate code that the Customer qualifies for as designated by the Customer.
 - Hand Net Energy Billing Service, Rate Code A50
 - Purchase and Sale Billing Service, Rate Code A51
 - Time of Day Purchase Service, Rate Code A52

A copy of the currently filed elected tariff is attached as Exhibit 2. The rates, terms and conditions for sales and purchases of electricity may be changed over the time this Contract is in force, due to actions of the Company or of the Commission, and Customer and Company agree that sales and purchases will be made under the rates in effect each month during the time this Contract is in force. At any time after making its initial election, the Customer can change this election to another rate code for which the Customer qualifies by calling the Company or by confirming the change through email communication with the Company. If the Customer no longer qualifies for its designated rate code, the Company will provide notice to the Customer and Customer will no longer be able to be on a rate code for which the Customer does not qualify.

d. Customer will pay a monthly metering charge under the Company tariff elected by the Customer, provided in Exhibit 2, and according to meter installation requirements in Section 5b. The monthly metering charge pays for the cost and installation of a bi-directional meter at the Service Address which measures electricity delivered by the Company to the Customer and energy received by the Company from the Customer, and the associated billing, operating and maintenance expenses. The metering charge may be changed over the time this Contract is in force, due to actions of the Company or of the Commission, and Customer and Company agree that the metering charge will be under the rates in effect each month during the time this Contract is in force.

(Continued on Sheet No. 9-15)

Date Filed: 10-31-13 By: David M. SparbyChristopher B. Clark Effective Date: 07-23-14

President, and CEO of Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015E002/M-13- Order Date: 07-23-14

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Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SOLAR*REWARDS CUSTOMER CONTRACT (CLOSED TO NEW APPLICANTS AS OF JUNE 17, 2019) (Continued)

Section No. 9

Original 1st Revised Sheet No. 34

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2.	Purchases	and Sales	of Flectricity.

Customer and Company agree:

- a. Company will sell electricity to Customer under the rate schedule in force for the class of customer to which Customer belongs.
- b. Customer agrees to supply electricity generated by the PV System in the form of ____ phase, ____ wire, alternating current at the nominal frequency of 60 hertz, and at a nominal voltage of ____.
- c. Company will buy electricity generated by the PV System from Customer under the applicable Company rate schedule filed with the Commission. Customer elects to sell electricity generated by the PV System in excess of Customer's own use under the terms of the following Company tariff:Net Metering rate code that the Customer qualifies for as designated by the Customer.
 - Hand Service, Rate Code A50
 - Purchase and Sale Billing Service, Rate Code A51
 - Time of Day Purchase Service, Rate Code A52

A copy of the currently filed elected tariff is attached as Exhibit 2. The rates, terms and conditions for sales and purchases of electricity, as referenced in the above tariffs, may be changed over the time this Contract is in force, due to actions of the Company or of the Commission, and Customer and Company agree that sales and purchases will be made under the rates in effect each month during the time this Contract is in force. However, the incentive payment discussed in Section 3(b) below shall remain the same for 10 years. At any time after making its initial election, the Customer can change this election to another rate code for which the Customer qualifies by calling the Company or by confirming the change through email communication with the Company. If the Customer no longer qualifies for its designated rate code, the Company will provide notice to the Customer and Customer will no longer be able to be on a rate code for which the Customer does not qualify.

d. Customer will pay a monthly metering charge under the Company tariff elected by the Customer, provided in Exhibit 2, and according to meter installation requirements in Section 5b. The monthly metering charge pays for the cost and installation of a bi-directional meter at the Service Address which measures electricity delivered by the Company to the Customer and energy received by the Company from the Customer, and the associated billing, operating and maintenance expenses. The metering charge may be changed over the time this Contract is in force, due to actions of the Company or of the Commission, and Customer and Company agree that the metering charge will be under the rates in effect each month during the time this Contract is in force.

(Continued on Sheet No. 9-35)

Date Filed: 10-31-13 By: David M. SparbyChristopher B. Clark Effective Date: 07-23-14

President, and CEO of Northern States Power Company, a Minnesota corporation

Docket No. — E002/M-13- Order Date: 07-23-14

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SOLAR*REWARDS CUSTOMER CONTRACT (CLOSED TO NEW APPLICANTS AS OF JUNE 17, 2019) (Continued)

Section No. 9

Original 1st Revised Sheet No. 35

2. Purchases and Sales of Electricity. (Continued)

- e. The Company will compute the charges and payments for purchases and sales of electricity for each billing period. If the payments for electricity generated by the PV System and sold to Company exceed the charges for electricity which the Company supplies and sells to Customer (i.e. net positive production by the PV System), the credit will accumulate on the Company's billing statement to Customer and will be paid by check to Customer within fifteen (15) days of the billing date once the accumulated credit exceeds \$25.00.
- f. Company may stop providing electricity to Customer during a system emergency, without notice. Company will give Customer prior notice by telephone or regular U.S. mail when Company is to stop providing electricity in non-emergency circumstances. The Company will not discriminate against Customer when it stops providing electricity or when it resumes providing electricity. Company may stop purchasing electricity from Customer when necessary to construct, install, maintain, repair, replace, remove, investigate or inspect any equipment or facilities within its electric system when this activity would be adversely affected if customer were supplying power to the system. Company will give Customer prior notice by telephone or regular U.S. mail letter when Company will stop purchasing electricity from Customer.

3. Ownership of Renewable Energy Credits and Incentive Payment.

Customer and Company agree:

- a. On the terms and subject to the conditions set forth in this Contract, the Customer agrees to convey to the Company and the Company will own all of the Renewable Energy Credits ("RECs"), defined in Section 5(I) below generated by the PV System at the Service Address for a term of ten (10) years from the installation date set forth in the "Actual System Installation Information" attached to this Contract as Exhibit 1.
- b. In consideration for Customer's participation in Company's Solar*Rewards Program, Company shall pay a predetermined per kWh financial incentive for the PV System production prior to any net metering adjustments for ten (10) years beginning with final commissioning. The incentive will remain set for the 10-year payment period and will not vary from year to year. PV System production will accumulate for each year. Within ninety (90) days after the end of each year, the Customer will receive an incentive check equal to the year's PV production, as measured by the billing statement that includes December 31, times the \$/kWh incentive. No incentive shall accrue after ten (10) years from the commissioning of the PV System, and the final incentive calculation will be at the end of that year, with the billing statement that includes December 31.
- c. The \$/kWh incentive is as follows: The Company shall pay \$0.08/kWh for the PV System-productionSee Exhibit 4, attached hereto. This \$/kWh incentive amount may be changed by a tariff amendment to this Contract prior to both parties signing this Contract.
- d. The \$/kWh incentive may be assigned by the Customer to a third party.

(Continued on Sheet No. 9-36)

Date Filed: 10-31-13 By: David M. SparbyChristopher B. Clark Effective Date: 07-23-14

President, and CEO of Northern States Power Company, a Minnesota corporation

Docket No. <u>E002/M-13-</u> Order Date: <u>07-23-14</u>

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SOLAR*REWARDS CUSTOMER CONTRACT

(CLOSED TO NEW APPLICANTS AS OF JUNE 17, 2019)

(Continued)

Section No. 9

1st2nd Revised Sheet No. 36

4. Representations by Customer.

Customer hereby makes the following representations and warranties to Company:

- a. Customer warrants that the person signing this Contract on behalf of Customer is authorized and competent to sign this Contract and to bind Customer to the terms of this Contract.
- b. Customer receives electric service from Company at the Service Address set forth above, is the person in whose name electric service is listed at the Service Address, and is the owner of the property at the Service Address.
- c. Customer is an end-use electric consumer located within the electric service territory of Company in Minnesota whose primary business is not the generation of electricity for retail or wholesale sale from the same facility. Customer is not installing the PV System at the Service Address in connection with a business of developing or improving real estate for resale.
- d. Customer shall install a new PV System at the Service Address, which shall have at least a five (5) year warranty, and shall be installed as of the date set forth in Exhibit 1.
- e. The PV System shall be located on the Customer's facilities at the Service Address at all times during the term of this Contract.
- f. The PV System has a minimum nameplate DC output capacity of 500 watts and a maximum capacity of no more than 40 kilowatts.
- g. Customer represents that the PV System shall be sized, when combined with other distributed generation resources and subscriptions provided under the Solar*Rewards Community program associated with the Service Address, to supply no more than one hundred twenty percent (120%) of the previous annual (12-month) consumption of electric energy by Customer at the Service Address. Customer acknowledges that Solar*Rewards Program is only available to PV Systems where the estimated annual generation, as determined by the National Renewable Energy Laboratory's PVWattsTM calculator is not more than 120% of the previous annual (12-month) electric energy consumption at the Service Address. If historical electric energy consumption data is not available due to new construction, the Company will calculate the estimated annual electric energy consumption.
- h. PV equipment including, but not limited to modules, inverters, etc., as described in Customer's completed Exhibit 1 shall meet eligibility requirements when listed as qualified on the Company website: www.xcelenergy.com.
- i. [Intentionally left blank].
- j. The Customer is not a participant in the Made in Minnesota program for the PV System covered by this Contract.
- k. The Customer has not received an incentive and is not a party to any other signed contract with the Company pertaining to the PV System. Customer shall not collect incentives from other state or utility programs for the PV system covered under this Contract.
- k.l. An application submitted by an installer for residential properties may only be submitted by a residential building contractor or remodeler that is licensed as such. The Company will perform a compliance check for this once at the beginning of the application process. A residential Customer need not have the installer submit the application, but may instead submit its own Solar*Rewards application in which case the Company will not check to determine whether the Customer's installer is so licensed.

(Continued on Sheet No. 9-37)

Date Filed: 06-08-18 By: Christopher B. Clark Effective Date: 11-02-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-18-38113-1015 Order Date: 11-02-18

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| <u>N</u> Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SOLAR*REWARDS CUSTOMER CONTRACT (CLOSED TO NEW APPLICANTS AS OF JUNE 17, 2019) (Continued)

Section No. 9 Original 1st Revised Sheet No. 45

Company provides the per kWh payment referenced in Section 3(b) for production over the 10-year period following commissioning to Customer.	И
Northern States Power Company, a Minnesota corporation	
By: as authorized agent for Northern States Power Company	
Title:	
Please mail the signed Solar*Rewards Contract to the Solar*Rewards program manager at the address shown below. The Contract will be signed by Company and a copy of the Contract will be mailed back to you.	
Solar*Rewards Company 414 Nicollet Mall, — 6th Floor Minneapolis, MN 55401 Fax: 800-252-4371 Solar*Rewards Program Manager:	<u> </u>

(Continued on Sheet No. 9-46)

10-31-13 Date Filed: By: David M. SparbyChristopher B. Clark Effective Date: 07-23-14

President, and CEO of Northern States Power Company, a Minnesota corporation

E002/M-13-Order Date: 07-23-14 Docket No.

1015E002/M-18-714

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SOLAR*REWARDS CUSTOMER CONTRACT (Continued)

Section No. 9
Original Sheet No. 48.01

Exhibit 4: Applicable Incentives

- A. For Solar*Rewards applications submitted and approved from July 23, 2014 through December 31, 2018, the incentive is \$0.08 / kWh for the PV System.
- B. For Solar*Rewards applications submitted and approved from January 1, 2019 through December 31, 2019, the following incentive levels apply:

Customer Category	Production Incentive per kWH	Up-front Incentive \$/W
Residential Systems	\$0.07	<u>N/A</u>
Low-Income Residential	\$0.07	\$2.00
Low-Income Multi-family / Non- profit (serving low-income customers)	<u>\$0.06</u>	<u>\$1.00</u>
Commercial Systems (including Solar*Rewards with Solar*Rewards Community Gardens)	<u>\$0.06</u>	N/A

The up-front incentive shall be payable within thirty (30) business days after the Company has granted the PV System permission to operate.

The eligibility criteria for the "Low-Income Residential", and "Low-Income Multi-family / Non-Profit (serving low-income customers)" Customer Categories are as follows:

1. Low-Income Residential: To be eligible for the Low-Income Residential Customer Category, the
Solar*Rewards application must be for a single-family home, and the Company will accept proof of Customer
having low-income benefits eligibility using one of the following: 1) eligibility for the Low-Income Home Energy
Assistance Program (LIHEAP) or 2) eligibility for the Weatherization Assistance Program (WAP). Verification will
be required by the installer that low-income benefits will be received by the customer, and will not be negatively
adjusted due to participation in the Solar*Rewards program.

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(Continued on Sheet No. 9-48.02)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

SOLAR*REWARDS CUSTOMER CONTRACT (Continued)

Section No. 9
Original Sheet No. 48.02

Exhibit 4: Applicable Incentives (Continued)

2. Low-Income Multi-Family/Non-Profit (serving low-income customers): Eligibility will be determined based on the number of units within the property. The following criteria apply:

a. 2-4 unit properties. At least fifty percent units need to be eligible for either 1) LIHEAP; 2) WAP; 3) Low-Income Renter Certification; or 4) Use Restriction. If a PV system is set up with net metering directly to individually metered customer units, then the PV System is not eligible under this Customer Category.

b. 5 or more unit properties. Properties of five or more units will be required to show that 66 percent or more of the units are rented to tenants with an annual income less than or equal to 60 percent of the area median income. The Company will use either the Low Income Renter Certification listing, WAP documentation, or the Use Restriction to determine whether low-Income households occupy the appropriate threshold of units within a building to qualify. Master metered properties and common areas will qualify for the Solar*Rewards incentive associated with their class of service, and this will typically be the Commercial Customer Category. If a PV system is set up with net metering directly to individually metered customer units, then the PV System is not eligible under this Customer Category.

c. Non-Profit (serving low-income customers), including government installations: Low-income incentives under the Solar*Rewards program are available to certain organizations working to provide benefit to low-income households through specific services. Any legal or governmental entity will be eligible for this incentive level if it can show that 50 percent or more of the anticipated PV System production is for its constituents who meet LIHEAP requirements or another pre-approved metric. The Company will require the submission of a 501(c)(3) form or similar statement, mission statement and proof of low-income constituency. For example, a school may provide and verify the percentage of students that receive free/reduced lunch, with at least 50 percent of the constituency meeting that threshold.

d. Eligibility timing and continued eligibility. The Company will require that documentation showing initial eligibility for the above Customer Categories be provided prior to the Company issuing a funding letter. Annual verification reporting will be required for five years after initial interconnection of the PV System to show that solar benefits continue to be passed on to qualifying low-income customers, and that the customer's low-income benefits are not being negatively adjusted due to participation in the Solar*Rewards program. Failure to document compliance with this, or failure to meet these requirements, following a 30-day cure period will result in withholding future incentive payments so as to effectively have a prorated claw back of upfront incentive provided for the project until we have recovered that portion of the up-front incentive prorated for that period of time associated with either failure to document compliance or failure to have compliance with the eligibility requirements. Once the claw-back has been accomplished, the \$ / kWh incentive will be as set forth in the funding letter and consistent with the above.

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Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

SOLAR*REWARDS CUSTOMER CONTRACT (Continued)

Section No. 9 Original Sheet No. 49.01

2. Purchases and Sales of Electricity.

Customer and Company agree:

- Company will buy electricity generated by the PV System from Customer under the applicable Company rate schedule filed with the Commission and under the applicable Net Metering rate code selected by that the Customer qualifies for as designated by the Customer under the Uniform Statewide Contract. The available rate codes are as follows:
 - Average Retail Rate, Rate Code A50
 - Sale to Company after Customer Self-Use, Non-TOD/TOD, Rate Codes A51/A52
 - Monthly Net Metering, Non-TOD/TOD, Rate Codes A53/A54
 - The rates, terms and conditions for sales and purchases of electricity, as referenced in the above tariffs, may be changed over the time this Contract is in force, due to actions of the Company or of the Commission, and Customer and Company agree that sales and purchases will be made under the rates in effect each month during the time this Contract is in force. However, the incentive payment discussed in Section 3(b) below shall remain the same for 10 years. At any time after making its initial election, the Customer can change this election to another rate code for which the Customer qualifies by calling the Company or by confirming the change through email communication with the Company. If the Customer no longer qualifies for its designated rate code, the Company will provide notice to the Customer and Customer will no longer be able to be on a rate code for which the Customer does not qualify.
- Customer will pay a monthly metering charge under the Company tariff elected by the Customer, and according to meter installation requirements in Section 5b. The monthly metering charge pays for the cost and installation of a bi-directional meter at the Service Address which measures electricity delivered by the Company to the Customer and energy received by the Company from the Customer, and the associated billing, operating and maintenance expenses. The metering charge may be changed over the time this Contract is in force, due to actions of the Company or of the Commission, and Customer and Company agree that the metering charge will be under the rates in effect each month during the time this Contract is in force.

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(Continued on Sheet No. 9-49.02)

Order Date:

Docket No.

Section No. 9

Original Sheet No. 49.02

3. Ownership of Renewable Energy Credits and Incentive Payment.

Customer and Company agree:

- a. On the terms and subject to the conditions set forth in this Contract, the Customer agrees to convey to the Company and the Company will own all of the Renewable Energy Credits
 ("RECs"), defined in Section 5(d) below generated by the PV System at the Service Address for a term of ten (10) years from the installation date set forth in the "Actual System Installation Information" attached to this Contract as Exhibit 1.
- b. In consideration for Customer's participation in Company's Solar*Rewards Program, Company shall pay a predetermined per kWh financial incentive for the PV System production prior to any net metering adjustments for ten (10) years beginning with final commissioning. The incentive will remain set for the 10-year payment period and will not vary from year to year. PV System production will accumulate for each year. Within ninety (90) days after the end of each year, the Customer will receive an incentive check equal to the year's PV production, as measured by the billing statement that includes December 31, times the \$/kWh incentive. No incentive shall accrue after ten (10) years from the commissioning of the PV System, and the final incentive calculation will be at the end of that year, with the billing statement that includes December 31.
- c. The \$/kWh incentive is as follows: The Company shall pay \$0.08/kWh for the PV System productionSee Exhibit 4, attached hereto. This \$/kWh incentive amount may be changed by a tariff amendment to this Contract prior to both parties signing this Contract.
- d. The \$/kWh incentive may be assigned by the Customer to a third party.

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(Continued on Sheet No. 9-49.03)

Date Filed:

By: Christopher B. Clark

Effective Date:

President Northern States Power Company a Minneseta corporation

SOLAR*REWARDS CUSTOMER CONTRACT (Continued)

Section No. 9 Original Sheet No. 49.03

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4. Representations by Customer.

Customer hereby makes the following representations and warranties to Company:

- Customer warrants that the person signing this Contract on behalf of Customer is authorized and competent to sign this Contract and to bind Customer to the terms of this Contract.
- Customer receives electric service from Company at the Service Address set forth above, is the person in whose name electric service is listed at the Service Address, and is the owner of the property at the Service Address.
- Customer is an end-use electric consumer located within the electric service territory of Company in Minnesota whose primary business is not the generation of electricity for retail or wholesale sale from the same facility. Customer is not installing the PV System at the Service Address in connection with a business of developing or improving real estate for resale.
- Customer shall install a new PV System at the Service Address, which shall have at least a five (5) year warranty, and shall be installed as of the date set forth in Exhibit 1.
- The PV System shall be located on the Customer's facilities at the Service Address at all times during the term of this Contract.
- f. The PV System has a minimum nameplate DC output capacity of 500 watts and a maximum capacity of no more than 40 kilowatts.
- g. Customer represents that the PV System shall be sized, when combined with other distributed generation resources and subscriptions provided under the Solar*Rewards Community program associated with the Service Address, to supply no more than one hundred twenty percent (120%) of the previous annual (12-month) consumption of electric energy by Customer at the Service Address. Customer acknowledges that Solar*Rewards Program is only available to PV Systems where the estimated annual generation, as determined by the National Renewable Energy Laboratory's PVWatts™ calculator is not more than 120% of the previous annual (12-month) electric energy consumption at the Service Address. If historical electric energy consumption data is not available due to new construction, the Company will calculate the estimated annual electric energy consumption.
- PV equipment including, but not limited to modules, inverters, etc., as described in Customer's completed Exhibit 1 shall meet eligibility requirements when listed as qualified on the Company website: www.xcelenergy.com.
- The Customer is not a participant in the Made in Minnesota program for the PV System covered by this Contract.
- The Customer has not received an incentive and is not a party to any other signed contract with the Company pertaining to the PV System. Customer shall not collect incentives from other state or utility programs for the PV System covered under this Contract.
- An application submitted by an installer for residential properties may only be submitted by a residential building contractor or remodeler that is licensed as such. The Company will perform a compliance check for this once at the beginning of the application process. A residential Customer need not have the installer submit the application, but may instead submit its own Solar*Rewards application in which case the Company will not check to determine whether the Customer's installer is so licensed.

(Continued on Sheet No. 9-49.04)

Effective Date:

Docket No. E002/M-13-1015 Order Date:

Date Filed:

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SOLAR*REWARDS CUSTOMER CONTRACT (Continued)	Section No. 9 Original Sheet No. 49.09
Company provides the per kWh payment referenced in Section 3(b) for properiod following commissioning to Customer.	oduction over the 10-year
Northern States Power Company, a Minnesota corporation	
By: Date: as authorized agent for Northern States Power Company	
do daliforizod agent for Notation States Forei Company	
Title:	

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(Continued on Sheet No. 9-49.10)

Date Filed: By: Christopher B. Clark

Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015

Order Date:

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SOLAR*REWARDS CUSTOMER CONTRACT (Continued)

Section No. 9
Original Sheet No. 49.13

Exhibit 3: Applicable Incentives

- A. For Solar*Rewards applications submitted and approved from July 23, 2014 through December 31, 2018, the incentive is \$0.08 / kWh for the PV System.
- B. For Solar*Rewards applications submitted and approved from January 1, 2019 through December 31, 2019, the following incentive levels apply:

<u>Customer Category</u>	Production Incentive per kWH	Up-front Incentive \$/W
Residential Systems	<u>\$0.07</u>	<u>N/A</u>
Low-Income Residential	<u>\$0.07</u>	\$2.00
Low-Income Multi-family / Non- profit (serving low-income customers)	<u>\$0.06</u>	<u>\$1.00</u>
Commercial Systems (including Solar*Rewards with Solar*Rewards Community Gardens)	<u>\$0.06</u>	N/A

The up-front incentive shall be payable within thirty (30) business days after the Company has granted the PV System permission to operate.

The eligibility criteria for the "Low-Income Residential", and "Low-Income Multi-family / Non-Profit (serving low-income customers)" Customer Categories are as follows:

1. Low-Income Residential: To be eligible for the Low-Income Residential Customer Category, the
Solar*Rewards application must be for a single-family home, and the Company will accept proof of Customer
having low-income benefits eligibility using one of the following: 1) eligibility for the Low-Income Home Energy
Assistance Program (LIHEAP) or 2) eligibility for the Weatherization Assistance Program (WAP). Verification will
be required by the installer that low-income benefits will be received by the customer, and will not be negatively
adjusted due to participation in the Solar*Rewards program.

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(Continued on Sheet No. 9-49.14)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

SOLAR*REWARDS CUSTOMER CONTRACT (Continued)

Section No. 9
Original Sheet No. 49.14

Exhibit 3: Applicable Incentives (Continued)

2. Low-Income Multi-Family/Non-Profit (serving low-income customers): Eligibility will be determined based on the number of units within the property. The following criteria apply:

- a. 2-4 unit properties. At least fifty percent units need to be eligible for either 1) LIHEAP; 2) WAP; 3) Low-Income Renter Certification; or 4) Use Restriction. If a PV system is set up with net metering directly to individually metered customer units, then the PV System is not eligible under this Customer Category.
- b. 5 or more unit properties. Properties of five or more units will be required to show that 66 percent or more of the units are rented to tenants with an annual income less than or equal to 60 percent of the area median income. The Company will use either the Low Income Renter Certification listing, WAP documentation, or the Use Restriction to determine whether low-Income households occupy the appropriate threshold of units within a building to qualify. Master metered properties and common areas will qualify for the Solar*Rewards incentive associated with their class of service, and this will typically be the Commercial Customer Category. If a PV system is set up with net metering directly to individually metered customer units, then the PV System is not eligible under this Customer Category.
- c. Non-Profit (serving low-income customers), including government installations: Low-income incentives under the Solar*Rewards program are available to certain organizations working to provide benefit to low-income households through specific services. Any legal or governmental entity will be eligible for this incentive level if it can show that 50 percent or more of the anticipated PV System production is for its constituents who meet LIHEAP requirements or another pre-approved metric. The Company will require the submission of a 501(c)(3) form or similar statement, mission statement and proof of low-income constituency. For example, a school may provide and verify the percentage of students that receive free/reduced lunch, with at least 50 percent of the constituency meeting that threshold.
- d. Eligibility timing and continued eligibility. The Company will require that documentation showing initial eligibility for the above Customer Categories be provided prior to the Company issuing a funding letter. Annual verification reporting will be required for five years after initial interconnection of the PV System to show that solar benefits continue to be passed on to qualifying low-income customers, and that the customer's low-income benefits are not being negatively adjusted due to participation in the Solar*Rewards program. Failure to document compliance with this, or failure to meet these requirements, following a 30-day cure period will result in withholding future incentive payments so as to effectively have a prorated claw back of upfront incentive provided for the project until we have recovered that portion of the up-front incentive prorated for that period of time associated with either failure to document compliance or failure to have compliance with the eligibility requirements. Once the claw-back has been accomplished, the \$ / kWh incentive will be as set forth in the funding letter and consistent with the above.

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

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Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (CLOSED TO NEW APPLICANTS AS OF JUNE 17, 2019) (Continued) Section No. 9

Original 1st Revised Sheet No. 51

2. Purchases and Sales of Electricity.

CustomerCommunity Solar Garden Operator and Company agree:

- a. Company will sell electricity to the Community Solar Garden Operator under the rate schedule in force for the class of customer to which the Community Solar Garden Operator belongs.
- b. Community Solar Garden Operator agrees to supply electricity generated by the PV System in the form of ___ phase, ___ wire, alternating current at the nominal frequency of 60 hertz, and at a nominal voltage of ___.
- c. Company will buy electricity generated by the PV System from the Community Solar Garden Operator under the applicable Company rate schedule filed with the Commission. The Community Solar Garden Operator elects to sell electricity generated by the PV System under the terms of the Standard Contract for Solar*Rewards Community (as may be amended, hereinafter "Standard Contract for Solar*Rewards Community") and this Solar*Rewards Community Contract for those Receiving Solar*Rewards Incentive.
- d. Community Solar Garden Operator will pay a monthly metering charge as set forth under the Standard Contract for Solar*Rewards Community. House Power and other metering requirements set forth in the Standard Contract for Solar*Rewards Community also apply.
- e. Sale of energy will be as set forth under the Standard Contract for Solar*Rewards Community and as set forth in this Solar*Rewards Community Contract for those Receiving Solar*Rewards Incentive.
- f. Company may stop providing electricity to the Community Solar Garden Operator during a system emergency, without notice. Company will give Community Solar Garden Operator prior notice by telephone or regular U.S. mail when Company is to stop providing electricity in non-emergency circumstances. The Company will not discriminate against Community Solar Garden Operator when it stops providing electricity or when it resumes providing electricity. Company may stop purchasing electricity from Community Solar Garden Operator when necessary to construct, install, maintain, repair, replace, remove, investigate or inspect any equipment or facilities within its electric system when this activity would be adversely affected if the Community Solar Garden Operator were supplying power to the system. Company will give the Community Solar Garden Operator notice consistent with the Standard Contract for Solar*Rewards Community when Company will stop purchasing electricity from the Community Solar Garden Operator.

(Continued on Sheet No. 9-52)

Date Filed: 09-30-13 & 10-31-13 By: David M. SparbyChristopher B. Clark Effective Date: 09-17-14

President, and CEO of Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-867 & E002/M-13- Order Date: 09-17-14

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SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (CLOSED TO NEW APPLICANTS AS OF JUNE 17, 2019) (Continued)

Section No. 9

Original 1st Revised Sheet No. 52

3. Ownership of Renewable Energy Credits and Incentive Payment.

Community Solar Garden Operator and Company agree:

- a. On the terms and subject to the conditions set forth in this Contract, the Community Solar Garden Operator agrees to convey to the Company and the Company will own all of the Renewable Energy Credits ("RECs"), defined in Section 5(c) below generated by the PV System at the Service Address for a term of ten (10) years from the installation date set forth in the "Actual System Installation Information" attached to this Contract as Exhibit 1.
- b. In consideration for Community Solar Garden Operator's participation in Company's Solar*Rewards Program, Company shall pay a predetermined per kWh financial incentive for the PV System production for ten (10) years beginning with final commissioning. The incentive will remain set for the 10-year payment period and will not vary from year to year. PV System production will accumulate for each year. Within ninety (90) days after the end of each year, the Community Solar Garden Operator will receive an incentive check equal to the year's PV production, as measured by the billing statement that includes December 31, times the \$/kWh incentive. No incentive shall accrue after ten (10) years from the commissioning of the PV System, and the final incentive calculation will be at the end of that year, with the billing statement that includes December 31.
- c. The \$/kWh incentive is as follows: The Company shall pay \$0.08/kWh for the PV system production.See Exhibit 2, attached hereto. This \$/kWh incentive amount may be changed by a tariff amendment to this Contract prior to both parties signing this Contract.
- d. The \$/kWh incentive may be assigned by the Community Solar Garden Operator to a third party.

4. Representations by Community Solar Garden Operator.

Community Solar Garden Operator hereby makes the following representations and warranties to Company:

- a. Community Solar Garden Operator warrants that the person signing this Contract on behalf of Community Solar Garden Operator is authorized and competent to sign this Contract and to bind Community Solar Garden Operator to the terms of this Contract.
- b. Community Solar Garden Operator is an end-use electric consumer located within the electric service territory of Company in Minnesota.
- c. Community Solar Garden Operator shall install a new PV System at the Service Address, which shall have at least a five (5) year warranty, and shall be installed as of the date set forth in Exhibit 1.

(Continued on Sheet No. 9-53)

Date Filed: 09-30-13 & 10-31-13 By: David M. Sparby Christopher B. Effective Date: 09-17-14

<u>Clark</u>

President, and CEO of Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-867 & E002/M-13- Order Date: 09-17-14

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (CLOSED TO NEW APPLICANTS AS OF JUNE 17, 2019) (Continued) Section No. 9

1st2nd Revised Sheet No. 53

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4. Representations by Community Solar Garden Operator. (Continued)

- d. The PV System shall be located on the Community Solar Garden Operator's facilities at the Service Address at all times during the term of this Contract.
- e. The PV System has a minimum nameplate DC output capacity of 1000 watts and a maximum capacity of no more than 40 kilowatts.
- f. PV equipment including, but not limited to modules, inverters, etc., as described in the Community Solar Garden Operator's completed Exhibit 1 shall meet eligibility requirements when listed as qualified on the Company website: www.xcelenergy.com.
- g. [Intentionally left blank].
- h. The Community Solar Garden Operator is not a participant in the Made in Minnesota program for the PV System covered by this Contract.
- i. The Community Solar Garden Operator has not received an incentive and is not a party to any other signed contract with the Company pertaining to the PV System other than the Standard Contract for Solar*Rewards Community. CustomerCommunity Solar Garden Operator shall not collect incentives from other state or utility programs for the PV system covered under this Contract.
- j. This Contract shall not be effective until the Community Solar Garden Operator has an effective Standard Contract for Solar*Rewards Community. In the event that Community Solar Garden Operator has breached the Standard Contract for Solar*Rewards Community or is otherwise for some period of time not entitled to payments under that contract, then for the same period of time the Community Solar Garden Operator is not entitled to payments under this Contract. Any period of time under which the Customer is not entitled to incentive payments shall not extend the ten (10) year payment period referenced in Section 3(b). In the event that the Standard Contract for Solar*Rewards Community is terminated, then this Contract shall also be terminated.

5. Requirements for PV System Installation, Operation, and Maintenance.

Metering.

- a. The metering requirements are set forth in the Standard Contract for Solar*Rewards Community. Interconnection to Company Distribution System.
- Interconnection requirements are set forth in the Standard Contract for Solar*Rewards Community.

(Continued on Sheet No. 9-54)

Date Filed: 06-08-18 By: Christopher B. Clark Effective Date: 11-02-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-18-381<u>13-1015</u> Order Date: 11-02-18

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

Solar*Rewards Program Manager: _____

SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (CLOSED TO NEW APPLICANTS AS OF JUNE 17, 2019) (Continued)

Section No. 9

Original 1st Revised Sheet No. 58

Please mail this signed Solar*Rewards Community Contract For Those Receiving Solar*Rewards Incentive to the Solar*Rewards program manager at the address shown below. The Contract will be signed by Company and a copy of the Contract will be mailed back to you.

Solar*Rewards Company 414 Nicollet Mall, — 6th Floor Minneapolis, MN 55401 Fax: 800-252-4371

Company provides the per kWh payment referenced in Section 3(b) for production over the 10-year

HH.T.

Date Filed: 09-30-13 & 10-31-13 By: David M. SparbyChristopher B. Clark Effective Date: 09-17-14

President, and CEO of Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-867 & E002/M-13-

1015 E002/M-13-1015

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (Continued)

Exhibit 2: Applicable Incentives

A. For Solar*Rewards applications submitted and approved from July 23, 2014 through December 31, 2018, the incentive is \$0.08 / kWh for the PV System.

B. For Solar*Rewards applications submitted and approved from January 1, 2019 through December 31, 2019, the following incentive levels apply:

	Production Incentive per kWH	Up-front Incentive \$/W
Low-Income Solar Garden	<u>\$0.06</u>	<u>\$0.50</u>
Solar*Rewards with Solar*Rewards Community Gardens	<u>\$0.06</u>	N/A

The up-front incentive shall be payable within thirty (30) business days after the Company has granted the PV System permission to operate.

The eligibility criteria for the "Low-Income Solar Garden" is as follows:

Any legal or governmental entity will be eligible for this incentive level if it can show that 50 percent or more of the anticipated PV System production is for its constituents who meet LIHEAP requirements or another pre-approved metric. The Company will require the submission of a 501(c)(3) form or similar statement, mission statement and proof of low-income constituency. For example, a school may provide and verify the percentage of students that receive free/reduced lunch, with at least 50 percent of the constituency meeting that threshold.

The Company will require that documentation showing initial eligibility be provided prior to the Company issuing a funding letter. Annual verification reporting will be required for five years after initial interconnection of the PV System to show that solar benefits continue to be passed on to qualifying low-income customers, and that the customer's low-income benefits are not being negatively adjusted due to participation in the Solar*Rewards program. Failure to document compliance with this, or failure to meet these requirements, following a 30-day cure period will result in withholding future incentive payments so as to effectively have a prorated claw back of upfront incentive provided for the project until we have recovered that portion of the up-front incentive prorated for that period of time associated with either failure to document compliance or failure to have compliance with the eligibility requirements. Once the claw-back has been accomplished, the \$ / kWh incentive will be as set forth in the funding letter and consistent with the above.

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Section No. 9

Original Sheet No. 59.001

Section No. 9

Original Sheet No. 59.02

SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (Continued)

2. Purchases and Sales of Electricity.

Community Solar Garden Operator Customer and Company agree:

- a. Company will sell electricity to the Community Solar Garden Operator under the rate schedule in force for the class of customer to which the Community Solar Garden Operator belongs.
- b. Community Solar Garden Operator agrees to supply electricity generated by the PV System in the form of phase, wire, alternating current at the nominal frequency of 60 hertz, and at a nominal voltage of .
- c. Company will buy electricity generated by the PV System from the Community Solar Garden Operator under the applicable Company rate schedule filed with the Commission. The Community Solar Garden Operator elects to sell electricity generated by the PV System under the terms of the Standard Contract for Solar*Rewards Community (as may be amended, hereinafter "Standard Contract for Solar*Rewards Community") and this Solar*Rewards Community Contract for those Receiving Solar*Rewards Incentive.
- d. Community Solar Garden Operator will pay a monthly metering charge as set forth under the Standard Contract for Solar*Rewards Community. House Power and other metering requirements set forth in the Standard Contract for Solar*Rewards Community also apply.
- e. Sale of energy will be as set forth under the Standard Contract for Solar*Rewards Community and as set forth in this Solar*Rewards Community Contract for those Receiving Solar*Rewards Incentive.

(Continued on Sheet No. 9-59.03)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

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SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (Continued)

3. Ownership of Renewable Energy Credits and Incentive Payment.

Community Solar Garden Operator and Company agree:

- a. On the terms and subject to the conditions set forth in this Contract, the Community Solar Garden Operator agrees to convey to the Company and the Company will own all of the Renewable Energy Credits ("RECs"), defined in Section 5(c) below generated by the PV System at the Service Address for a term of ten (10) years from the installation date set forth in the "Actual System Installation Information" attached to this Contract as Exhibit 1.
- b. In consideration for Community Solar Garden Operator's participation in Company's Solar*Rewards Program, Company shall pay a predetermined per kWh financial incentive for the PV System production for ten (10) years beginning with final commissioning. The incentive will remain set for the 10-year payment period and will not vary from year to year. PV System production will accumulate for each year. Within ninety (90) days after the end of each year, the Community Solar Garden Operator will receive an incentive check equal to the year's PV production, as measured by the billing statement that includes December 31, times the \$/kWh incentive. No incentive shall accrue after ten (10) years from the commissioning of the PV System, and the final incentive calculation will be at the end of that year, with the billing statement that includes December 31.
- c. The \$/kWh incentive is as follows: The Company shall pay \$0.08/kWh for the PV system productionSee Exhibit 2, attached hereto. This \$/kWh incentive amount may be changed by a tariff amendment to this Contract prior to both parties signing this Contract.
- d. The \$/kWh incentive may be assigned by the Community Solar Garden Operator to a third party.

4. Representations by Community Solar Garden Operator.

Community Solar Garden Operator hereby makes the following representations and warranties to Company:

- a. Community Solar Garden Operator warrants that the person signing this Contract on behalf of Community Solar Garden Operator is authorized and competent to sign this Contract and to bind Community Solar Garden Operator to the terms of this Contract.
- b. Community Solar Garden Operator is an end-use electric consumer located within the electric service territory of Company in Minnesota.
- c. Community Solar Garden Operator shall install a new PV System at the Service Address, which shall have at least a five (5) year warranty, and shall be installed as of the date set forth in Exhibit 1.

(Continued on Sheet No. 9-59.04)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

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Section No. 9

Original Sheet No. 59.03

Section No. 9

Original Sheet No. 59.04

- d. The PV System shall be located on the Community Solar Garden Operator's facilities at the Service Address at all times during the term of this Contract.
- e. The PV System has a minimum nameplate DC output capacity of 1000 watts and a maximum capacity of no more than 40 kilowatts.
- f. PV equipment including, but not limited to modules, inverters, etc., as described in the Community Solar Garden Operator's completed Exhibit 1 shall meet eligibility requirements when listed as qualified on the Company website: www.xcelenergy.com.
- g. [Intentionally left blank].
- h. The Community Solar Garden Operator is not a participant in the Made in Minnesota program for the PV System covered by this Contract.
- i. The Community Solar Garden Operator has not received an incentive and is not a party to any other signed contract with the Company pertaining to the PV System other than the Standard Contract for Solar*Rewards Community. Community Solar Garden OperatorCustomer shall not collect incentives from other state or utility programs for the PV system covered under this Contract.
- j. This Contract shall not be effective until the Community Solar Garden Operator has an effective Standard Contract for Solar*Rewards Community. In the event that Community Solar Garden Operator has breached the Standard Contract for Solar*Rewards Community or is otherwise for some period of time not entitled to payments under that contract, then for the same period of time the Community Solar Garden Operator is not entitled to payments under this Contract. Any period of time under which the Customer is not entitled to incentive payments shall not extend the ten (10) year payment period referenced in Section 3(b). In the event that the Standard Contract for Solar*Rewards Community is terminated, then this Contract shall also be terminated.

5. Requirements for PV System Installation, Operation, and Maintenance.

Metering.

a. The metering requirements are set forth in the Standard Contract for Solar*Rewards Community.

Interconnection to Company Distribution System.

b. Interconnection requirements are set forth in the Standard Contract for Solar*Rewards
 Community applicable to applications filed on or after June 17, 2019.

(Continued on Sheet No. 9-59.05)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (Continued)

Section No. 9 Original Sheet No. 59.09

Company provides the per kWh payment referenced in Section 3(b) for production over the 10-year period following commissioning to Community Solar Garden Operator.

Northern States Power Company, a Minnesota corporation By: Date: as authorized agent for Northern States Power Company Title: Please mail this signed Solar*Rewards Community Contract For Those Receiving Solar*Rewards Incentive to the Solar*Rewards program manager at the address shown below. The Contract will be signed by Company and a copy of the Contract will be mailed back to you. Solar*Rewards Company 414 Nicollet Mall, —6th Floor Minneapolis, MN 55401 Fax: 800-252-4371 **Solar*Rewards Program Manager:**

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(Continued on Sheet No. 9-59.10)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (Continued)

Exhibit 2: Applicable Incentives

Section No. 9

Original Sheet No. 59.11

A. For Solar*Rewards applications submitted and approved from July 23, 2014 through December 31, 2018, the incentive is \$0.08 / kWh for the PV System.

B. For Solar*Rewards applications submitted and approved from January 1, 2019 through December 31, 2019, the following incentive levels apply:

	Production Incentive per kWH	Up-front Incentive \$/W
Low-Income Solar Garden	\$0.0 <u>6</u>	<u>\$0.50</u>
Solar*Rewards with Solar*Rewards Community Gardens	<u>\$0.06</u>	<u>N/A</u>

The up-front incentive shall be payable within thirty (30) business days after the Company has granted the PV System permission to operate.

The eligibility criteria for the "Low-Income Solar Garden" is as follows:

Any legal or governmental entity will be eligible for this incentive level if it can show that 50 percent or more of the anticipated PV System production is for its constituents who meet LIHEAP requirements or another pre-approved metric. The Company will require the submission of a 501(c)(3) form or similar statement, mission statement and proof of low-income constituency. For example, a school may provide and verify the percentage of students that receive free/reduced lunch, with at least 50 percent of the constituency meeting that threshold.

The Company will require that documentation showing initial eligibility be provided prior to the Company issuing a funding letter. Annual verification reporting will be required for five years after initial interconnection of the PV System to show that solar benefits continue to be passed on to qualifying low-income customers, and that the customer's low-income benefits are not being negatively adjusted due to participation in the Solar*Rewards program. Failure to document compliance with this, or failure to meet these requirements, following a 30-day cure period will result in withholding future incentive payments so as to effectively have a prorated claw back of upfront incentive provided for the project until we have recovered that portion of the up-front incentive prorated for that period of time associated with either failure to document compliance or failure to have compliance with the eligibility requirements. Once the claw-back has been accomplished, the \$ / kWh incentive will be as set forth in the funding letter and consistent with the above.

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

Docket No. E002/M-13-1015 Solar*Rewards Petition Attachment A

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SOLAR*REWARDS CUSTOMER CONTRACT (CLOSED TO NEW APPLICANTS) (Continued)	Section No. 1st Revised Sheet No.	-
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2. Purchases and Sales of Electricity.

Customer and Company agree:

- Company will sell electricity to Customer under the rate schedule in force for the class of customer to which Customer belongs.
- b. Customer agrees to supply electricity generated by the PV System in the form of ____ phase, ____ wire, alternating current at the nominal frequency of 60 hertz, and at a nominal voltage of ____.
- c. Company will buy electricity generated by the PV System from Customer under the applicable Company rate schedule filed with the Commission. Customer elects to sell electricity generated by the PV System in excess of Customer's own use under the terms of the Company Net Metering rate code that the Customer qualifies for as designated by the Customer.
 - The rates, terms and conditions for sales and purchases of electricity may be changed over the time this Contract is in force, due to actions of the Company or of the Commission, and Customer and Company agree that sales and purchases will be made under the rates in effect each month during the time this Contract is in force. At any time after making its initial election, the Customer can change this election to another rate code for which the Customer qualifies by calling the Company or by confirming the change through email communication with the Company. If the Customer no longer qualifies for its designated rate code, the Company will provide notice to the Customer and Customer will no longer be able to be on a rate code for which the Customer does not qualify.
- d. Customer will pay a monthly metering charge under the Company tariff elected by the Customer, provided in Exhibit 2, and according to meter installation requirements in Section 5b. The monthly metering charge pays for the cost and installation of a bi-directional meter at the Service Address which measures electricity delivered by the Company to the Customer and energy received by the Company from the Customer, and the associated billing, operating and maintenance expenses. The metering charge may be changed over the time this Contract is in force, due to actions of the Company or of the Commission, and Customer and Company agree that the metering charge will be under the rates in effect each month during the time this Contract is in force.

(Continued on Sheet No. 9-15)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

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SOLAR*REWARDS CUSTOMER CONTRACT (CLOSED TO NEW APPLICANTS AS OF JUNE 17, 2019) (Continued)

Section No. 9
1st Revised Sheet No. 34

2. Purchases and Sales of Electricity.

Customer and Company agree:

- a. Company will sell electricity to Customer under the rate schedule in force for the class of customer to which Customer belongs.
- b. Customer agrees to supply electricity generated by the PV System in the form of ____ phase, ____ wire, alternating current at the nominal frequency of 60 hertz, and at a nominal voltage of ____.
- c. Company will buy electricity generated by the PV System from Customer under the applicable Company rate schedule filed with the Commission. Customer elects to sell electricity generated by the PV System in excess of Customer's own use under the terms of the Company Net Metering rate code that the Customer qualifies for as designated by the Customer.

The rates, terms and conditions for sales and purchases of electricity, as referenced in the above tariffs, may be changed over the time this Contract is in force, due to actions of the Company or of the Commission, and Customer and Company agree that sales and purchases will be made under the rates in effect each month during the time this Contract is in force. However, the incentive payment discussed in Section 3(b) below shall remain the same for 10 years. At any time after making its initial election, the Customer can change this election to another rate code for which the Customer qualifies by calling the Company or by confirming the change through email communication with the Company. If the Customer no longer qualifies for its designated rate code, the Company will provide notice to the Customer and Customer will no longer be able to be on a rate code for which the Customer does not qualify.

d. Customer will pay a monthly metering charge under the Company tariff elected by the Customer, provided in Exhibit 2, and according to meter installation requirements in Section 5b. The monthly metering charge pays for the cost and installation of a bi-directional meter at the Service Address which measures electricity delivered by the Company to the Customer and energy received by the Company from the Customer, and the associated billing, operating and maintenance expenses. The metering charge may be changed over the time this Contract is in force, due to actions of the Company or of the Commission, and Customer and Company agree that the metering charge will be under the rates in effect each month during the time this Contract is in force.

(Continued on Sheet No. 9-35)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

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SOLAR*REWARDS CUSTOMER CONTRACT (CLOSED TO NEW APPLICANTS AS OF JUNE 17, 2019) (Continued)

Section No. 9 1st Revised Sheet No. 35

2. Purchases and Sales of Electricity. (Continued)

- e. The Company will compute the charges and payments for purchases and sales of electricity for each billing period. If the payments for electricity generated by the PV System and sold to Company exceed the charges for electricity which the Company supplies and sells to Customer (i.e. net positive production by the PV System), the credit will accumulate on the Company's billing statement to Customer and will be paid by check to Customer within fifteen (15) days of the billing date once the accumulated credit exceeds \$25.00.
- f. Company may stop providing electricity to Customer during a system emergency, without notice. Company will give Customer prior notice by telephone or regular U.S. mail when Company is to stop providing electricity in non-emergency circumstances. The Company will not discriminate against Customer when it stops providing electricity or when it resumes providing electricity. Company may stop purchasing electricity from Customer when necessary to construct, install, maintain, repair, replace, remove, investigate or inspect any equipment or facilities within its electric system when this activity would be adversely affected if customer were supplying power to the system. Company will give Customer prior notice by telephone or regular U.S. mail letter when Company will stop purchasing electricity from Customer.

3. Ownership of Renewable Energy Credits and Incentive Payment.

Customer and Company agree:

- a. On the terms and subject to the conditions set forth in this Contract, the Customer agrees to convey to the Company and the Company will own all of the Renewable Energy Credits ("RECs"), defined in Section 5(I) below generated by the PV System at the Service Address for a term of ten (10) years from the installation date set forth in the "Actual System Installation Information" attached to this Contract as Exhibit 1.
- b. In consideration for Customer's participation in Company's Solar*Rewards Program, Company shall pay a predetermined per kWh financial incentive for the PV System production prior to any net metering adjustments for ten (10) years beginning with final commissioning. The incentive will remain set for the 10-year payment period and will not vary from year to year. PV System production will accumulate for each year. Within ninety (90) days after the end of each year, the Customer will receive an incentive check equal to the year's PV production, as measured by the billing statement that includes December 31, times the \$/kWh incentive. No incentive shall accrue after ten (10) years from the commissioning of the PV System, and the final incentive calculation will be at the end of that year, with the billing statement that includes December 31.
- c. The \$/kWh incentive is as follows: See Exhibit 4, attached hereto. This \$/kWh incentive amount may be changed by a tariff amendment to this Contract prior to both parties signing this Contract.
- d. The \$/kWh incentive may be assigned by the Customer to a third party.

(Continued on Sheet No. 9-36)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

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SOLAR*REWARDS CUSTOMER CONTRACT (CLOSED TO NEW APPLICANTS AS OF JUNE 17, 2019) (Continued)

Section No. 9 2nd Revised Sheet No. 36

4. Representations by Customer.

Customer hereby makes the following representations and warranties to Company:

- a. Customer warrants that the person signing this Contract on behalf of Customer is authorized and competent to sign this Contract and to bind Customer to the terms of this Contract.
- b. Customer receives electric service from Company at the Service Address set forth above, is the person in whose name electric service is listed at the Service Address, and is the owner of the property at the Service Address.
- c. Customer is an end-use electric consumer located within the electric service territory of Company in Minnesota whose primary business is not the generation of electricity for retail or wholesale sale from the same facility. Customer is not installing the PV System at the Service Address in connection with a business of developing or improving real estate for resale.
- d. Customer shall install a new PV System at the Service Address, which shall have at least a five (5) year warranty, and shall be installed as of the date set forth in Exhibit 1.
- e. The PV System shall be located on the Customer's facilities at the Service Address at all times during the term of this Contract.
- f. The PV System has a minimum nameplate DC output capacity of 500 watts and a maximum capacity of no more than 40 kilowatts.
- g. Customer represents that the PV System shall be sized, when combined with other distributed generation resources and subscriptions provided under the Solar*Rewards Community program associated with the Service Address, to supply no more than one hundred twenty percent (120%) of the previous annual (12-month) consumption of electric energy by Customer at the Service Address. Customer acknowledges that Solar*Rewards Program is only available to PV Systems where the estimated annual generation, as determined by the National Renewable Energy Laboratory's PVWattsTM calculator is not more than 120% of the previous annual (12-month) electric energy consumption at the Service Address. If historical electric energy consumption data is not available due to new construction, the Company will calculate the estimated annual electric energy consumption.
- h. PV equipment including, but not limited to modules, inverters, etc., as described in Customer's completed Exhibit 1 shall meet eligibility requirements when listed as qualified on the Company website: www.xcelenergy.com.
- i. [Intentionally left blank].
- j. The Customer is not a participant in the Made in Minnesota program for the PV System covered by this Contract.
- k. The Customer has not received an incentive and is not a party to any other signed contract with the Company pertaining to the PV System. Customer shall not collect incentives from other state or utility programs for the PV system covered under this Contract.
- I. An application submitted by an installer for residential properties may only be submitted by a residential building contractor or remodeler that is licensed as such. The Company will perform a compliance check for this once at the beginning of the application process. A residential Customer need not have the installer submit the application, but may instead submit its own Solar*Rewards application in which case the Company will not check to determine whether the Customer's installer is so licensed.

(Continued on Sheet No. 9-37)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

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Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SOLAR*REWARDS CUSTOMER CONTRACT
(CLOSED TO NEW APPLICANTS AS OF JUNE 17, 2019
(Continued)

Section No. 9 1st Revised Sheet No. 45

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Company provides the per kWh payment referenced in Section 3(b) for production over the 10-year period following commissioning to Customer.

Northern States Power Company, a Minnesota corporation		
By: as authorized agent for Northern States Power Company	Date:	
Title:	-	
Please mail the signed Solar*Rewards Contract to the So address shown below. The Contract will be signed by Comailed back to you.		
Solar*Rewards 414 Nicollet Mall, Minneapolis, MN 55401 Manager:	Fax: 800-252-4371 Solar*Rewards Program	

(Continued on Sheet No. 9-46)

Date Filed: By: Christopher B. Clark Effective Date: President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-18-714 Order Date:

SOLAR*REWARDS CUSTOMER CONTRACT (Continued)

Section No. 9 Original Sheet No. 48.01

Exhibit 4: Applicable Incentives

- A. For Solar*Rewards applications submitted and approved from July 23, 2014 through December 31, 2018, the incentive is \$0.08 / kWh for the PV System.
- B. For Solar*Rewards applications submitted and approved from January 1, 2019 through December 31, 2019, the following incentive levels apply:

Customer Category	Production Incentive per kWH	ntive Up-front Incentive \$/W	
Residential Systems	\$0.07	N/A	
Low-Income Residential	\$0.07	\$2.00	
Low-Income Multi-family / Non- profit (serving low-income customers)	\$0.06	\$1.00	
Commercial Systems (including Solar*Rewards with Solar*Rewards Community Gardens)	\$0.06	N/A	

The up-front incentive shall be payable within thirty (30) business days after the Company has granted the PV System permission to operate.

The eligibility criteria for the "Low-Income Residential", and "Low-Income Multi-family / Non-Profit (serving low-income customers)" Customer Categories are as follows:

1. Low-Income Residential: To be eligible for the Low-Income Residential Customer Category, the Solar*Rewards application must be for a single-family home, and the Company will accept proof of Customer having low-income benefits eligibility using one of the following: 1) eligibility for the Low-Income Home Energy Assistance Program (LIHEAP) or 2) eligibility for the Weatherization Assistance Program (WAP). Verification will be required by the installer that low-income benefits will be received by the customer, and will not be negatively adjusted due to participation in the Solar*Rewards program.

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(Continued on Sheet No. 9-48.02)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

SOLAR*REWARDS CUSTOMER CONTRACT (Continued)

Exhibit 4: Applicable Incentives (Continued)

Section No.

Original Sheet No.

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48.02

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- 2. **Low-Income Multi-Family/Non-Profit (serving low-income customers)**: Eligibility will be determined based on the number of units within the property. The following criteria apply:
 - a. 2-4 unit properties. At least fifty percent units need to be eligible for either 1) LIHEAP; 2) WAP; 3) Low-Income Renter Certification; or 4) Use Restriction. If a PV system is set up with net metering directly to individually metered customer units, then the PV System is not eligible under this Customer Category.
 - b. 5 or more unit properties. Properties of five or more units will be required to show that 66 percent or more of the units are rented to tenants with an annual income less than or equal to 60 percent of the area median income. The Company will use either the Low Income Renter Certification listing, WAP documentation, or the Use Restriction to determine whether low-Income households occupy the appropriate threshold of units within a building to qualify. Master metered properties and common areas will qualify for the Solar*Rewards incentive associated with their class of service, and this will typically be the Commercial Customer Category. If a PV system is set up with net metering directly to individually metered customer units, then the PV System is not eligible under this Customer Category.
 - c. Non-Profit (serving low-income customers), including government installations: Low-income incentives under the Solar*Rewards program are available to certain organizations working to provide benefit to low-income households through specific services. Any legal or governmental entity will be eligible for this incentive level if it can show that 50 percent or more of the anticipated PV System production is for its constituents who meet LIHEAP requirements or another pre-approved metric. The Company will require the submission of a 501(c)(3) form or similar statement, mission statement and proof of low-income constituency. For example, a school may provide and verify the percentage of students that receive free/reduced lunch, with at least 50 percent of the constituency meeting that threshold.
 - d. Eligibility timing and continued eligibility. The Company will require that documentation showing initial eligibility for the above Customer Categories be provided prior to the Company issuing a funding letter. Annual verification reporting will be required for five years after initial interconnection of the PV System to show that solar benefits continue to be passed on to qualifying low-income customers, and that the customer's low-income benefits are not being negatively adjusted due to participation in the Solar*Rewards program. Failure to document compliance with this, or failure to meet these requirements, following a 30-day cure period will result in withholding future incentive payments so as to effectively have a prorated claw back of upfront incentive provided for the project until we have recovered that portion of the up-front incentive prorated for that period of time associated with either failure to document compliance or failure to have compliance with the eligibility requirements. Once the claw-back has been accomplished, the \$ / kWh incentive will be as set forth in the funding letter and consistent with the above.

Date Filed:

By: Christopher B. Clark

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

SOLAR*REWARDS CUSTOMER CONTRACT (Continued)

Section No. Original Sheet No. 49.01

2. Purchases and Sales of Electricity.

Customer and Company agree:

Company will buy electricity generated by the PV System from Customer under the applicable Company rate schedule filed with the Commission and under the applicable Net Metering rate code that the Customer qualifies for as designated by the Customer under the Uniform Statewide Contract.

The rates, terms and conditions for sales and purchases of electricity, as referenced in the above tariffs, may be changed over the time this Contract is in force, due to actions of the Company or of the Commission, and Customer and Company agree that sales and purchases will be made under the rates in effect each month during the time this Contract is in force. However, the incentive payment discussed in Section 3(b) below shall remain the same for 10 years. At any time after making its initial election, the Customer can change this election to another rate code for which the Customer qualifies by calling the Company or by confirming the change through email communication with the Company. If the Customer no longer qualifies for its designated rate code, the Company will provide notice to the Customer and Customer will no longer be able to be on a rate code for which the Customer does not qualify.

b. Customer will pay a monthly metering charge under the Company tariff elected by the Customer, and according to meter installation requirements in Section 5b. The monthly metering charge pays for the cost and installation of a bi-directional meter at the Service Address which measures electricity delivered by the Company to the Customer and energy received by the Company from the Customer, and the associated billing, operating and maintenance expenses. The metering charge may be changed over the time this Contract is in force, due to actions of the Company or of the Commission, and Customer and Company agree that the metering charge will be under the rates in effect each month during the time this Contract is in force.

(Continued on Sheet No. 9-49.02)

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SOLAR*REWARDS CUSTOMER CONTRACT (Continued)

Section No. 9
Original Sheet No. 49.02

3. Ownership of Renewable Energy Credits and Incentive Payment.

Customer and Company agree:

- a. On the terms and subject to the conditions set forth in this Contract, the Customer agrees to convey to the Company and the Company will own all of the Renewable Energy Credits ("RECs"), defined in Section 5(d) below generated by the PV System at the Service Address for a term of ten (10) years from the installation date set forth in the "Actual System Installation Information" attached to this Contract as Exhibit 1.
- b. In consideration for Customer's participation in Company's Solar*Rewards Program, Company shall pay a predetermined per kWh financial incentive for the PV System production prior to any net metering adjustments for ten (10) years beginning with final commissioning. The incentive will remain set for the 10-year payment period and will not vary from year to year. PV System production will accumulate for each year. Within ninety (90) days after the end of each year, the Customer will receive an incentive check equal to the year's PV production, as measured by the billing statement that includes December 31, times the \$/kWh incentive. No incentive shall accrue after ten (10) years from the commissioning of the PV System, and the final incentive calculation will be at the end of that year, with the billing statement that includes December 31.
- c. The \$/kWh incentive is as follows: See Exhibit 4, attached hereto. This \$/kWh incentive amount may be changed by a tariff amendment to this Contract prior to both parties signing this Contract.
- d. The \$/kWh incentive may be assigned by the Customer to a third party.

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(Continued on Sheet No. 9-49.03)

Date Filed:

By: Christopher B. Clark

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015

By: Christopher B. Clark

President, Northern States Power Company, a Minnesota corporation

Order Date:

SOLAR*REWARDS CUSTOMER CONTRACT (Continued)

Section No. Original Sheet No. 49.03

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4. Representations by Customer.

Customer hereby makes the following representations and warranties to Company:

- a. Customer warrants that the person signing this Contract on behalf of Customer is authorized and competent to sign this Contract and to bind Customer to the terms of this Contract.
- b. Customer receives electric service from Company at the Service Address set forth above, is the person in whose name electric service is listed at the Service Address, and is the owner of the property at the Service Address.
- c. Customer is an end-use electric consumer located within the electric service territory of Company in Minnesota whose primary business is not the generation of electricity for retail or wholesale sale from the same facility. Customer is not installing the PV System at the Service Address in connection with a business of developing or improving real estate for resale.
- d. Customer shall install a new PV System at the Service Address, which shall have at least a five (5) year warranty, and shall be installed as of the date set forth in Exhibit 1.
- e. The PV System shall be located on the Customer's facilities at the Service Address at all times during the term of this Contract.
- The PV System has a minimum nameplate DC output capacity of 500 watts and a maximum capacity of no more than 40 kilowatts.
- Customer represents that the PV System shall be sized, when combined with other distributed generation resources and subscriptions provided under the Solar*Rewards Community program associated with the Service Address, to supply no more than one hundred twenty percent (120%) of the previous annual (12-month) consumption of electric energy by Customer at the Service Address. Customer acknowledges that Solar*Rewards Program is only available to PV Systems where the estimated annual generation, as determined by the National Renewable Energy Laboratory's PVWatts™ calculator is not more than 120% of the previous annual (12-month) electric energy consumption at the Service Address. If historical electric energy consumption data is not available due to new construction, the Company will calculate the estimated annual electric energy consumption.
- h. PV equipment including, but not limited to modules, inverters, etc., as described in Customer's completed Exhibit 1 shall meet eligibility requirements when listed as qualified on the Company website: www.xcelenergy.com.
- The Customer is not a participant in the Made in Minnesota program for the PV System covered by this Contract.
- The Customer has not received an incentive and is not a party to any other signed contract with the Company pertaining to the PV System. Customer shall not collect incentives from other state or utility programs for the PV System covered under this Contract.
- k. An application submitted by an installer for residential properties may only be submitted by a residential building contractor or remodeler that is licensed as such. The Company will perform a compliance check for this once at the beginning of the application process. A residential Customer need not have the installer submit the application, but may instead submit its own Solar*Rewards application in which case the Company will not check to determine whether the Customer's installer is so licensed.

(Continued on Sheet No. 9-49.04)

E002/M-13-1015 Docket No.

Date Filed:

Effective Date:

SOLAR*REWARDS CUSTOMER CONTRACT	Section No. 9	
(Continued)	Original Sheet No. 49.09	
Company provides the per kWh payment referenced in Section period following commissioning to Customer.	n 3(b) for production over the 10-year	_ N
Northern States Power Company, a Minnesota corporation		
By: as authorized agent for Northern States Power Company	Date:	
as authorized agent for Northern States Power Company		
Title:		
Please mail the signed Solar*Rewards Contract to the Solar*Readdress shown below. The Contract will be signed by Comparmailed back to you.		
Solar*Rewards 414 Nicollet Mall, Minneapolis, MN 55401 Fax: Manager:	800-252-4371 Solar*Rewards Program	 - N
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(Continued on Sheet No. 9-49.10)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation Docket No. E002/M-13-1015 Order Date: Т

SOLAR*REWARDS CUSTOMER CONTRACT (Continued)

Section No. 9 Original Sheet No. 49.13

Exhibit 3: Applicable Incentives

- A. For Solar*Rewards applications submitted and approved from July 23, 2014 through December 31, 2018, the incentive is \$0.08 / kWh for the PV System.
- B. For Solar*Rewards applications submitted and approved from January 1, 2019 through December 31, 2019, the following incentive levels apply:

Customer Category	Production Incentive per kWH	Up-front Incentive \$/W	
Residential Systems	\$0.07	N/A	
Low-Income Residential	\$0.07	\$2.00	
Low-Income Multi-family / Non- profit (serving low-income customers)	\$0.06	\$1.00	
Commercial Systems (including Solar*Rewards with Solar*Rewards Community Gardens)	\$0.06	N/A	

The up-front incentive shall be payable within thirty (30) business days after the Company has granted the PV System permission to operate.

The eligibility criteria for the "Low-Income Residential", and "Low-Income Multi-family / Non-Profit (serving low-income customers)" Customer Categories are as follows:

1. Low-Income Residential: To be eligible for the Low-Income Residential Customer Category, the Solar*Rewards application must be for a single-family home, and the Company will accept proof of Customer having low-income benefits eligibility using one of the following: 1) eligibility for the Low-Income Home Energy Assistance Program (LIHEAP) or 2) eligibility for the Weatherization Assistance Program (WAP). Verification will be required by the installer that low-income benefits will be received by the customer, and will not be negatively adjusted due to participation in the Solar*Rewards program.

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(Continued on Sheet No. 9-49.14)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Order Date:

Docket No. E002/M-13-1015

SOLAR*REWARDS CUSTOMER CONTRACT (Continued)

Exhibit 3: Applicable Incentives (Continued)

Section No.

Original Sheet No.

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- 2. **Low-Income Multi-Family/Non-Profit (serving low-income customers)**: Eligibility will be determined based on the number of units within the property. The following criteria apply:
 - a. 2-4 unit properties. At least fifty percent units need to be eligible for either 1) LIHEAP; 2) WAP; 3) Low-Income Renter Certification; or 4) Use Restriction. If a PV system is set up with net metering directly to individually metered customer units, then the PV System is not eligible under this Customer Category.
 - b. 5 or more unit properties. Properties of five or more units will be required to show that 66 percent or more of the units are rented to tenants with an annual income less than or equal to 60 percent of the area median income. The Company will use either the Low Income Renter Certification listing, WAP documentation, or the Use Restriction to determine whether low-Income households occupy the appropriate threshold of units within a building to qualify. Master metered properties and common areas will qualify for the Solar*Rewards incentive associated with their class of service, and this will typically be the Commercial Customer Category. If a PV system is set up with net metering directly to individually metered customer units, then the PV System is not eligible under this Customer Category.
 - c. Non-Profit (serving low-income customers), including government installations: Low-income incentives under the Solar*Rewards program are available to certain organizations working to provide benefit to low-income households through specific services. Any legal or governmental entity will be eligible for this incentive level if it can show that 50 percent or more of the anticipated PV System production is for its constituents who meet LIHEAP requirements or another pre-approved metric. The Company will require the submission of a 501(c)(3) form or similar statement, mission statement and proof of low-income constituency. For example, a school may provide and verify the percentage of students that receive free/reduced lunch, with at least 50 percent of the constituency meeting that threshold.
 - d. Eligibility timing and continued eligibility. The Company will require that documentation showing initial eligibility for the above Customer Categories be provided prior to the Company issuing a funding letter. Annual verification reporting will be required for five years after initial interconnection of the PV System to show that solar benefits continue to be passed on to qualifying low-income customers, and that the customer's low-income benefits are not being negatively adjusted due to participation in the Solar*Rewards program. Failure to document compliance with this, or failure to meet these requirements, following a 30-day cure period will result in withholding future incentive payments so as to effectively have a prorated claw back of upfront incentive provided for the project until we have recovered that portion of the up-front incentive prorated for that period of time associated with either failure to document compliance or failure to have compliance with the eligibility requirements. Once the claw-back has been accomplished, the \$ / kWh incentive will be as set forth in the funding letter and consistent with the above.

Date Filed:

By: Christopher B. Clark

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (CLOSED TO NEW APPLICANTS AS OF JUNE 17, 2019) (Continued)

Section No. 9 1st Revised Sheet No. 51

2. Purchases and Sales of Electricity.

Community Solar Garden Operator and Company agree:

- a. Company will sell electricity to the Community Solar Garden Operator under the rate schedule in force for the class of customer to which the Community Solar Garden Operator belongs.
- b. Community Solar Garden Operator agrees to supply electricity generated by the PV System in the form of ___ phase, ___ wire, alternating current at the nominal frequency of 60 hertz, and at a nominal voltage of ___.
- c. Company will buy electricity generated by the PV System from the Community Solar Garden Operator under the applicable Company rate schedule filed with the Commission. The Community Solar Garden Operator elects to sell electricity generated by the PV System under the terms of the Standard Contract for Solar*Rewards Community (as may be amended, hereinafter "Standard Contract for Solar*Rewards Community") and this Solar*Rewards Community Contract for those Receiving Solar*Rewards Incentive.
- d. Community Solar Garden Operator will pay a monthly metering charge as set forth under the Standard Contract for Solar*Rewards Community. House Power and other metering requirements set forth in the Standard Contract for Solar*Rewards Community also apply.
- e. Sale of energy will be as set forth under the Standard Contract for Solar*Rewards Community and as set forth in this Solar*Rewards Community Contract for those Receiving Solar*Rewards Incentive.
- f. Company may stop providing electricity to the Community Solar Garden Operator during a system emergency, without notice. Company will give Community Solar Garden Operator prior notice by telephone or regular U.S. mail when Company is to stop providing electricity in non-emergency circumstances. The Company will not discriminate against Community Solar Garden Operator when it stops providing electricity or when it resumes providing electricity. Company may stop purchasing electricity from Community Solar Garden Operator when necessary to construct, install, maintain, repair, replace, remove, investigate or inspect any equipment or facilities within its electric system when this activity would be adversely affected if the Community Solar Garden Operator were supplying power to the system. Company will give the Community Solar Garden Operator notice consistent with the Standard Contract for Solar*Rewards Community when Company will stop purchasing electricity from the Community Solar Garden Operator.

(Continued on Sheet No. 9-52)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

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SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (CLOSED TO NEW APPLICANTS AS OF JUNE 17, 2019) (Continued)

Section No. 9 1st Revised Sheet No. 52

3. Ownership of Renewable Energy Credits and Incentive Payment.

Community Solar Garden Operator and Company agree:

- a. On the terms and subject to the conditions set forth in this Contract, the Community Solar Garden Operator agrees to convey to the Company and the Company will own all of the Renewable Energy Credits ("RECs"), defined in Section 5(c) below generated by the PV System at the Service Address for a term of ten (10) years from the installation date set forth in the "Actual System Installation Information" attached to this Contract as Exhibit 1.
- b. In consideration for Community Solar Garden Operator's participation in Company's Solar*Rewards Program, Company shall pay a predetermined per kWh financial incentive for the PV System production for ten (10) years beginning with final commissioning. The incentive will remain set for the 10-year payment period and will not vary from year to year. PV System production will accumulate for each year. Within ninety (90) days after the end of each year, the Community Solar Garden Operator will receive an incentive check equal to the year's PV production, as measured by the billing statement that includes December 31, times the \$/kWh incentive. No incentive shall accrue after ten (10) years from the commissioning of the PV System, and the final incentive calculation will be at the end of that year, with the billing statement that includes December 31.
- c. The \$/kWh incentive is as follows: See Exhibit 2, attached hereto. This \$/kWh incentive amount may be changed by a tariff amendment to this Contract prior to both parties signing this Contract.
- d. The \$/kWh incentive may be assigned by the Community Solar Garden Operator to a third party.

4. Representations by Community Solar Garden Operator.

Community Solar Garden Operator hereby makes the following representations and warranties to Company:

- a. Community Solar Garden Operator warrants that the person signing this Contract on behalf of Community Solar Garden Operator is authorized and competent to sign this Contract and to bind Community Solar Garden Operator to the terms of this Contract.
- b. Community Solar Garden Operator is an end-use electric consumer located within the electric service territory of Company in Minnesota.
- c. Community Solar Garden Operator shall install a new PV System at the Service Address, which shall have at least a five (5) year warranty, and shall be installed as of the date set forth in Exhibit 1.

(Continued on Sheet No. 9-53)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (CLOSED TO NEW APPLICANTS AS OF JUNE 17, 2019) (Continued)

Section No. 9 2nd Revised Sheet No. 53

4. Representations by Community Solar Garden Operator. (Continued)

- d. The PV System shall be located on the Community Solar Garden Operator's facilities at the Service Address at all times during the term of this Contract.
- e. The PV System has a minimum nameplate DC output capacity of 1000 watts and a maximum capacity of no more than 40 kilowatts.
- f. PV equipment including, but not limited to modules, inverters, etc., as described in the Community Solar Garden Operator's completed Exhibit 1 shall meet eligibility requirements when listed as qualified on the Company website: www.xcelenergy.com.
- g. [Intentionally left blank].
- h. The Community Solar Garden Operator is not a participant in the Made in Minnesota program for the PV System covered by this Contract.
- i. The Community Solar Garden Operator has not received an incentive and is not a party to any other signed contract with the Company pertaining to the PV System other than the Standard Contract for Solar*Rewards Community. Community Solar Garden Operator shall not collect incentives from other state or utility programs for the PV system covered under this Contract.
- j. This Contract shall not be effective until the Community Solar Garden Operator has an effective Standard Contract for Solar*Rewards Community. In the event that Community Solar Garden Operator has breached the Standard Contract for Solar*Rewards Community or is otherwise for some period of time not entitled to payments under that contract, then for the same period of time the Community Solar Garden Operator is not entitled to payments under this Contract. Any period of time under which the Customer is not entitled to incentive payments shall not extend the ten (10) year payment period referenced in Section 3(b). In the event that the Standard Contract for Solar*Rewards Community is terminated, then this Contract shall also be terminated.

5. Requirements for PV System Installation, Operation, and Maintenance.

Metering.

a. The metering requirements are set forth in the Standard Contract for Solar*Rewards Community. Interconnection to Company Distribution System.

 Interconnection requirements are set forth in the Standard Contract for Solar*Rewards Community.

(Continued on Sheet No. 9-54)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

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Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (CLOSED TO NEW APPLICANTS AS OF JUNE 17, 2019) (Continued)

Section No. 9 1st Revised Sheet No. 58

Company provides the per kWh payment referenced in Section 3(b) for production over the 10-year period following commissioning to Community Solar Garden Operator.

lorthern States Power Company, a Minnesota corporation		
Зу:	Date:	
as authorized agent for Northern States Power Company		
Fitle:		
Please mail this signed Solar*Rewards Community C ncentive to the Solar*Rewards program manager at signed by Company and a copy of the Contract will b	the address shown below. The Contract will be	
Solar*Rewards 414 Nicollet Mall, Minneapolis, MN 55 Manager:	401 Fax: 800-252-4371 Solar*Rewards Program	

Date Filed: By: Christopher B. Clark Effective Date: President, Northern States Power Company, a Minnesota corporation Order Date:

Docket No. E002/M-13-1015

SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (Continued)

Exhibit 2: Applicable Incentives

A. For Solar*Rewards applications submitted and approved from July 23, 2014 through December 31, 2018, the incentive is \$0.08 / kWh for the PV System.

B. For Solar*Rewards applications submitted and approved from January 1, 2019 through December 31, 2019, the following incentive levels apply:

	Production Incentive per kWH	Up-front Incentive \$/W
Low-Income Solar Garden	\$0.06	\$0.50
Solar*Rewards with Solar*Rewards Community Gardens	\$0.06	N/A

The up-front incentive shall be payable within thirty (30) business days after the Company has granted the PV System permission to operate.

The eligibility criteria for the "Low-Income Solar Garden" is as follows:

Any legal or governmental entity will be eligible for this incentive level if it can show that 50 percent or more of the anticipated PV System production is for its constituents who meet LIHEAP requirements or another pre-approved metric. The Company will require the submission of a 501(c)(3) form or similar statement, mission statement and proof of low-income constituency. For example, a school may provide and verify the percentage of students that receive free/reduced lunch, with at least 50 percent of the constituency meeting that threshold.

The Company will require that documentation showing initial eligibility be provided prior to the Company issuing a funding letter. Annual verification reporting will be required for five years after initial interconnection of the PV System to show that solar benefits continue to be passed on to qualifying low-income customers, and that the customer's low-income benefits are not being negatively adjusted due to participation in the Solar*Rewards program. Failure to document compliance with this, or failure to meet these requirements, following a 30-day cure period will result in withholding future incentive payments so as to effectively have a prorated claw back of upfront incentive provided for the project until we have recovered that portion of the up-front incentive prorated for that period of time associated with either failure to document compliance or failure to have compliance with the eligibility requirements. Once the claw-back has been accomplished, the \$ / kWh incentive will be as set forth in the funding letter and consistent with the above.

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Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015

Order Date:

Section No. 9

Original Sheet No. 59.001

SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (Continued)

Section No. 9 Original Sheet No. 59.02

2. Purchases and Sales of Electricity.

Customer and Company agree:

- Company will sell electricity to the Community Solar Garden Operator under the rate schedule in force for the class of customer to which the Community Solar Garden Operator belongs.
- b. Community Solar Garden Operator agrees to supply electricity generated by the PV System in the form of ___ phase, ___ wire, alternating current at the nominal frequency of 60 hertz, and at a nominal voltage of ___.
- c. Company will buy electricity generated by the PV System from the Community Solar Garden Operator under the applicable Company rate schedule filed with the Commission. The Community Solar Garden Operator elects to sell electricity generated by the PV System under the terms of the Standard Contract for Solar*Rewards Community (as may be amended, hereinafter "Standard Contract for Solar*Rewards Community") and this Solar*Rewards Community Contract for those Receiving Solar*Rewards Incentive.
- d. Community Solar Garden Operator will pay a monthly metering charge as set forth under the Standard Contract for Solar*Rewards Community. House Power and other metering requirements set forth in the Standard Contract for Solar*Rewards Community also apply.
- Sale of energy will be as set forth under the Standard Contract for Solar*Rewards Community
 and as set forth in this Solar*Rewards Community Contract for those Receiving Solar*Rewards
 Incentive.

(Continued on Sheet No. 9-59.03)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

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SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (Continued)

3. Ownership of Renewable Energy Credits and Incentive Payment.

Community Solar Garden Operator and Company agree:

- a. On the terms and subject to the conditions set forth in this Contract, the Community Solar Garden Operator agrees to convey to the Company and the Company will own all of the Renewable Energy Credits ("RECs"), defined in Section 5(c) below generated by the PV System at the Service Address for a term of ten (10) years from the installation date set forth in the "Actual System Installation Information" attached to this Contract as Exhibit 1.
- b. In consideration for Community Solar Garden Operator's participation in Company's Solar*Rewards Program, Company shall pay a predetermined per kWh financial incentive for the PV System production for ten (10) years beginning with final commissioning. The incentive will remain set for the 10-year payment period and will not vary from year to year. PV System production will accumulate for each year. Within ninety (90) days after the end of each year, the Community Solar Garden Operator will receive an incentive check equal to the year's PV production, as measured by the billing statement that includes December 31, times the \$/kWh incentive. No incentive shall accrue after ten (10) years from the commissioning of the PV System, and the final incentive calculation will be at the end of that year, with the billing statement that includes December 31.
- c. The \$/kWh incentive is as follows: See Exhibit 2, attached hereto. This \$/kWh incentive amount may be changed by a tariff amendment to this Contract prior to both parties signing this Contract.
- d. The \$/kWh incentive may be assigned by the Community Solar Garden Operator to a third party.

4. Representations by Community Solar Garden Operator.

Community Solar Garden Operator hereby makes the following representations and warranties to Company:

- a. Community Solar Garden Operator warrants that the person signing this Contract on behalf of Community Solar Garden Operator is authorized and competent to sign this Contract and to bind Community Solar Garden Operator to the terms of this Contract.
- b. Community Solar Garden Operator is an end-use electric consumer located within the electric service territory of Company in Minnesota.
- c. Community Solar Garden Operator shall install a new PV System at the Service Address, which shall have at least a five (5) year warranty, and shall be installed as of the date set forth in Exhibit
 1.

(Continued on Sheet No. 9-59.04)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

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Section No. 9

Original Sheet No. 59.03

SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (Continued)

4. Representations by Community Solar Garden Operator. (Continued)

- d. The PV System shall be located on the Community Solar Garden Operator's facilities at the Service Address at all times during the term of this Contract.
- e. The PV System has a minimum nameplate DC output capacity of 1000 watts and a maximum capacity of no more than 40 kilowatts.
- f. PV equipment including, but not limited to modules, inverters, etc., as described in the Community Solar Garden Operator's completed Exhibit 1 shall meet eligibility requirements when listed as qualified on the Company website: www.xcelenergy.com.
- g. [Intentionally left blank].
- h. The Community Solar Garden Operator is not a participant in the Made in Minnesota program for the PV System covered by this Contract.
- i. The Community Solar Garden Operator has not received an incentive and is not a party to any other signed contract with the Company pertaining to the PV System other than the Standard Contract for Solar*Rewards Community. Customer shall not collect incentives from other state or utility programs for the PV system covered under this Contract.
- j. This Contract shall not be effective until the Community Solar Garden Operator has an effective Standard Contract for Solar*Rewards Community. In the event that Community Solar Garden Operator has breached the Standard Contract for Solar*Rewards Community or is otherwise for some period of time not entitled to payments under that contract, then for the same period of time the Community Solar Garden Operator is not entitled to payments under this Contract. Any period of time under which the Customer is not entitled to incentive payments shall not extend the ten (10) year payment period referenced in Section 3(b). In the event that the Standard Contract for Solar*Rewards Community is terminated, then this Contract shall also be terminated.

5. Requirements for PV System Installation, Operation, and Maintenance.

Metering.

a. The metering requirements are set forth in the Standard Contract for Solar*Rewards Community. Interconnection to Company Distribution System.

 Interconnection requirements are set forth in the Standard Contract for Solar*Rewards Community applicable to applications filed on or after June 17, 2019.

(Continued on Sheet No. 9-59.05)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date:

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Section No. 9

Original Sheet No. 59.04

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SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (Continued)

Original Sheet No. 59.09

Company provides the per kWh payment referenced in Section 3(b) for production over the 10-year period following commissioning to Community Solar Garden Operator.

Northern States Power Company, a Minnesota corporation		
Ву:	Date:	
By: as authorized agent for Northern States Power Compan	у	
Title:		
	ity Contract For Those Receiving Solar*Rewards r at the address shown below. The Contract will be vill be mailed back to you.	
Solar*Rewards 414 Nicollet Mall, Minneapolis, MN	N 55401 Fax: 800-252-4371 Solar*Rewards Program	

(Continued on Sheet No. 9-59.10)

Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-1015 Order Date: Т

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Section No. 9

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SOLAR*REWARDS COMMUNITY CONTRACT FOR THOSE RECEIVING SOLAR*REWARDS INCENTIVE (Continued)

Exhibit 2: Applicable Incentives

Section No. 9

Original Sheet No. 59.11

A. For Solar*Rewards applications submitted and approved from July 23, 2014 through December 31, 2018, the incentive is \$0.08 / kWh for the PV System.

B. For Solar*Rewards applications submitted and approved from January 1, 2019 through December 31, 2019, the following incentive levels apply:

	Production Incentive per kWH	Up-front Incentive \$/W
Low-Income Solar Garden	\$0.06	\$0.50
Solar*Rewards with Solar*Rewards Community Gardens	\$0.06	N/A

The up-front incentive shall be payable within thirty (30) business days after the Company has granted the PV System permission to operate.

The eligibility criteria for the "Low-Income Solar Garden" is as follows:

Any legal or governmental entity will be eligible for this incentive level if it can show that 50 percent or more of the anticipated PV System production is for its constituents who meet LIHEAP requirements or another pre-approved metric. The Company will require the submission of a 501(c)(3) form or similar statement, mission statement and proof of low-income constituency. For example, a school may provide and verify the percentage of students that receive free/reduced lunch, with at least 50 percent of the constituency meeting that threshold.

The Company will require that documentation showing initial eligibility be provided prior to the Company issuing a funding letter. Annual verification reporting will be required for five years after initial interconnection of the PV System to show that solar benefits continue to be passed on to qualifying low-income customers, and that the customer's low-income benefits are not being negatively adjusted due to participation in the Solar*Rewards program. Failure to document compliance with this, or failure to meet these requirements, following a 30-day cure period will result in withholding future incentive payments so as to effectively have a prorated claw back of upfront incentive provided for the project until we have recovered that portion of the up-front incentive prorated for that period of time associated with either failure to document compliance or failure to have compliance with the eligibility requirements. Once the claw-back has been accomplished, the \$ / kWh incentive will be as set forth in the funding letter and consistent with the above.

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Date Filed: By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

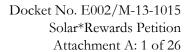
Order Date:

Docket No. E002/M-13-1015

Annotations to Xcel Energy Redlines – Sections 9, Solar*Rewards – Docket No. 13-1015 (Note – where edits are to same tariff sheet as in Docket 18-714, the edits proposed in 18-714 as reflected in the filing in the current docket are in blue font on the redline version of the tariff.)

Section and Sheet #	Par. #	Associated Docket	Notes
First Genera	tion Solar*	Rewards	
Sec. 9, 14	2.c	Docket Nos. 16-222 M-13-1015	Revisions to this first generation S*R tariff reflect new Rate Code options implemented in Docket No. 16-222 as reflected in the Section 9 tariff, Sheets 2 through 4.3. The rate codes that should be available under this S*R Contract are A50 (Average Retail Rate) so long as total QF nameplate capacity at the same site is less than 40 kW (AC), A51/A52 (Sale to Company after Customer Self-Use, Non-TOD/TOD); 53/54 (Monthly Net Metering, Non-TOD/TOD). Rate Codes A55/56 (Annual Net Metering, Non-TOD/TOD) can be available where total QF nameplate at the same site is at least 40 kW but less than 1000 kW (AC). We added wording to state that at any time after making its initial selection, the customer at any time should be able to change its selection to any available rate code by calling the Company or confirming the change through email communication with the Company. Additionally, the customer cannot remain on a rate code for which it no longer qualifies.
Second Gene	eration Sola	r*Rewards	
Sec. 9, 34	2.c	Docket Nos. 16-222 13-1015	Edits are similar to those suggested for Sheet 14, Par. 2.c. The difference is that Sheet 14 applies to the first generation S*R contract, while Sheet 34 applies to the second generation S*R contract.
Sec. 9, 35	3.c		Adjustment to production based incentive plus addition of up-front incentive for low-income beginning in 2019.
Sec. 9, 36	4.1.	13-1015	Added consumer protection provisions, consistent with Deputy Commissioner's Decision of November 21, 2018.
Sec. 9, 45			Minor clean-up on updating the address for the Solar*Rewards program.
Sec 9, 48.01 - 48.02	Exhibit 4	13-1015	Specific incentives identified and low-income project rules and requirements added based on the Deputy Commissioner's November 21, 2018 Decision in Docket No. 13-1015.

Section and Sheet #	Par. #	Associated Docket	Notes
Third Genera	ation Solar	*Rewards	
Sec 9, 49.01	2.a	18-381	Seeking additional changes to par. 2.a to match the changes we are seeking on sheet 34 to par. 2.c.
Sec. 9, 49.02			Mirrors change on Sheet 35
Sec 9, 49.03	4,k.		Added consumer protection provisions, consistent with Deputy Commissioner's Decision of November 21, 2018 – similar to edits on Sheet 36.
Sec 9, 49.09			Minor edit to address – similar to edits on Sheet 45.
Sec. 9, 49.13 - 49.14		13-1015	This new sheet for the third generation contract corresponds to Sheets 48.01 – 48.02 with the new rates for 2019.
Solar*Reward	ds Commu	nity Contract for	those receiving Solar*Rewards Incentives
Sec. 9, 51	top		The term "Customer" has been replaced with the term "Community Solar Garden Operator" to be consistent with the defined terms on Sheet 50.
Sec 9, 52			Adjustment to production based incentive plus addition of up-front incentive for low-income beginning in 2019. New rates are reflected in new Sheet 59.001, Exhibit 2. The rates are based on the Deputy Commissioner's November 21, 2018 Decision in Docket No. 13-1015.
Sec. 9, 53	4.j		The term "Customer" has been replaced with the term "Community Solar Garden Operator" to be consistent with the defined terms on Sheet 50.
Sec. 9, 58			Minor edit to address – similar to edits on Sheet 45.
Sec. 9, 59.001	Exh 2		This provides pricing for the 2019 Solar*Reward program year for S*R solar gardens applications not subject to the MN DIP.
Sec. 9, 59.02			The term "Customer" has been replaced with the term "Community Solar Garden Operator" to be consistent with the defined terms.
Sec. 9, 59.03			Adjustment to production based incentive plus addition of up-front incentive for low-income beginning in 2019. New rates are reflected in new Sheet 59.11, Exhibit 2. Rates are based on the Deputy Commissioner's November 21, 2018 Decision in Docket No. 13-1015.
Sec. 9, 59.04			Mirrors changes on sheet 53.
Sec. 9, 59.09			Minor clean-up on updating the address for the Solar*Rewards program.
Sec. 9, 59.11	Exh. 2		Adds rates applicable to 2019 program year for Solar Gardens with Solar*Rewards incentive for applications subject to the MN DIP.



Issue Date: November 14, 2018

Docket No: E002/M-13-1015



DECISION

BEFORE THE COMMISSIONER OF THE MINNESOTA DEPARTMENT OF COMMERCE

WILLIAM GRANT, DEPUTY COMMISSIONER

In the Matter of Northern States Power Company's Solar*Rewards Program

SOLAR*REWARDS PROCEDURAL HISTORY

On May 23, 2013, Governor Dayton signed legislation requiring Xcel Energy (Xcel or the Company) to operate a performance-based solar incentive program beginning in 2014. The statute was amended during the 2017 legislative session expanding the program. The Program is subject to review and approval by the Deputy Commissioner of the Minnesota Department of Commerce (Commerce) per legislation.¹

This docket addresses the Solar*Rewards program that commenced in August 2014 and was modified by statute for program year 2018. In the *Decision* dated March 28, 2014, the Solar*Rewards program was approved by the Deputy Commissioner of the Department of Commerce (Deputy Commissioner) with modifications and a requirement to report on the status of Solar*Rewards every June 1 during the program's operation. ²

On Jun 29, 2018, per the Deputy Commissioner's original *Decision*, Xcel filed its fourth annual report summarizing the program's operations for the 2017 program year.³

The Company filed *Comments* regarding its program on Aug 15, 2018. *Comments* were also received from Fresh Energy and Grid Alternatives on Aug 15, 2018.⁴,⁵

On September 25, 2018, Xcel filed a supplement⁶ to its report to reflect changes made to the program during the 2017 legislative session. Department staff (Staff) issued a *Notice of Completion and Process* on October 8, 2017 that included a request for input on how to optimize the program funding available and any other topics of interest to the Company and

¹ Minn Statutes 116C.7792

² Analysis and Decision of the Minnesota Department of Commerce, Division of Energy Resources. Docket No. E002/M-13-1015. March 28, 2014

³ 2017 Annual Report Solar*Rewards Docket No. E002/M-13-1015 Jun 29, 2018.

⁴ Fresh Energy Comments. Solar Rewards Docket No. E002/M-13-1015. Aug 15, 2018.

⁵ Grid Alternatives Comments. Solar Rewards Docket No. E002/M-13-1015. Aug 15, 2018.

⁶ 2017 Annual Report Supplement. Docket No. E002/M-13-1015. Sep 25, 2018.

Docket No. E002/M-13-1015 Solar*Rewards Petition Attachment A: 2 of 26

stakeholders.⁷ The notice established a schedule for the process and timeline for review of the Company's 2017 *Solar*Rewards Compliance Filing,* modified as follows:

- Compliance Filing Submitted: June 29, 2018 8
- Notice of Completion and Compliance: July 20, 2018
- Public Comments Due on Compliance Filing: August 15, 2018
- Staff Proposed Decision Due: October 12, 2018
- Company Reply Comments Due: October 24, 2018
- Public and Reply Comments Due: October 29, 2018
- Deputy Commissioner's Decision: November 14, 2018

Staff's analysis and recommendations concerning the program were presented in the *Proposed Decision* on October 12, 2018. Staff recommended approval of Xcel's report and operation of Solar*Rewards subject to the following:

- A low-income program be adopted as part of Solar*Rewards, as proposed, subject to favorable support in public comment and annual status reports include the following additional information if a low-income program is approved and implemented:
 - A list of projects that applied under the LI program;
 - Category of project (single family residential, multi-family, non-profit)
 - Community solar (Y/N)
 - Corresponding new capacity;
 - Status (Approved, Denied, Withdrawn, Completed)
 - Energy production by year;
 - Participant system costs;
 - The criteria under which mission-oriented non-profit and government entities were approved; and
 - Any special issues or successes for the previous year
- Incentive level approval be determined by the Deputy Commissioner after public comments are received. Staff recommends differentiation in commercial and residential incentives.
- For each Solar*Rewards application that applies for interconnection, beginning in 2019, the Company report the following information as part of future annual reports.
 - Did engineering review result in distribution upgrades to utility distribution equipment to be paid by the customer? (Y/N)
 - If yes, what was the estimated cost presented to the customer?
 - • If yes, what was the final cost paid by the interconnecting customer?

⁷ Notice of Completion and Process. Solar*Rewards Docket No. E002/M-13-1015. October 8, 2017.

⁸ The annual report is typically due June 1 of each year. This year Xcel requested and Commerce approved filing by June 30, 2018 due to changes in statute.

⁹ Analysis, Recommendations, and Proposed Decision of the Staff of the Minnesota Department of Commerce, Division of Energy Resources Regarding Solar*Rewards. Docket no. E002/M-13-1015 October 12, 2018.

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- The Deputy Commissioner review the Company's response to budget questions in determining the portion of IT enhancement expenditures that should be sourced from the Solar*Rewards budget.
- The Company target program launch for the first Monday following January 1 every year. If there are circumstances that prevent meeting this timeline, the Company may seek an extension from the Deputy Commissioner.
- The Company explore options for tracking how well actual incentives paid align with incentive funds reserved and report back to the Deputy Commissioner on ways to capture this important metric in its next *Annual Report*.

The Company filed *Reply Comments* regarding the *Proposed Decision* on October 24, 2018.¹⁰ Public comments were received from seven additional parties including the MN Solar Energy Industries Association, Fresh Energy, iDEAL Energies, Grid Alternatives, MN Housing and Finance Authority, Minnesota National Association of Housing and Redevelopment Officials, and Minnesota resident, Larry Etkin on October 29, 2018.

DEPUTY COMMISSIONER'S DECISION-MAKING APPROACH

The Deputy Commissioner has the authority under Minnesota Statutes §116C.7792 to approve the Company's program. The original *Decision* requires "... comprehensive reports annually to keep interested parties apprised of program outcomes and developments and to allow the Commissioner to review and determine if program modifications may be necessary." ¹¹

When making decisions regarding Solar*Rewards, the Deputy Commissioner considers a number of factors including:

- Compliance with Minnesota Rules and Statutes;
- Compliance with previous Decisions;
- The Deputy Commissioner's authority;
- Staff's Proposed Decision;
- The Company's responses to Information Requests;
- Comments and reply comments from interested parties;
- The Company's approved tariff;
- Program budgets and expenditures; and
- The broader public interest.

¹⁰ Xcel Reply Comments Solar*Rewards Docket no. E002/M-13-1015 October 24, 2018.

¹¹ Analysis and Decision of the Minnesota Department of Commerce, Division of Energy Resources. Docket No. E002/M-13-1015. March 28, 2014.

DEPUTY COMMISSIONER'S ANALYSIS AND FINDINGS

I. COMPLIANCE WITH MINNESOTA STATUTES SECTION 116C.7792

During the 2018 legislative session, the statute establishing the Program was amended. The current statute reads:

116C.7792 SOLAR ENERGY INCENTIVE PROGRAM.

The utility subject to section <u>116C.779</u> shall operate a program to provide solar energy production incentives for solar energy systems of no more than a total aggregate nameplate capacity of 40 kilowatts direct current per premise. The owner of a solar energy system installed before June 1, 2018, is eligible to receive a production incentive under this section for any additional solar energy systems constructed at the same customer location, provided that the aggregate capacity of all systems at the customer location does not exceed 40 kilowatts. The program shall be operated for eight consecutive calendar years commencing in 2014. \$5,000,000 shall be allocated in each of the first four years, \$15,000,000 in the fifth year, \$10,000,000 in each of the sixth and seventh years, and \$5,000,000 in the eighth year from funds withheld from transfer to the renewable development account under section 116C.779, subdivision 1, paragraphs (b) and (e), and placed in a separate account for the purpose of the solar production incentive program operated by the utility and not for any other program or purpose. Any unspent amount allocated in the fifth year is available until December 31 of the sixth year. Any unspent amount remaining at the end of any other allocation year must be transferred to the renewable development account. The solar system must be sized to less than 120 percent of the customer's on-site annual energy consumption when combined with other distributed generation resources and subscriptions provided under section 216B.1641 associated with the premise. The production incentive must be paid for ten years commencing with the commissioning of the system. The utility must file a plan to operate the program with the commissioner of commerce. The utility may not operate the program until it is approved by the commissioner. A change to the program to include projects up to a nameplate capacity of 40 kilowatts or less does not require the utility to file a plan with the commissioner. Any plan approved by the commissioner of commerce must not provide an increased incentive scale over prior years unless the commissioner demonstrates that changes in the market for solar energy facilities require an increase.

The Deputy Commissioner agrees with Staff that Xcel Energy's 2017 Annual Report and 2017 Annual Solar Rewards Report Supplement filings demonstrate compliance with Minnesota Statutes §116C.7792, including:

- Maximum nameplate capacity for participating systems is 40 kW DC (an increase from 20 kW DC) as of June 2018;
- The Program must operate for eight consecutive calendar years beginning in 2014 with varying levels of appropriated funding as shown in Table 1;
- System size must be less than 120 percent of customer's on-site annual electricity consumption when combined with other on-site distributed generation resources on the premises;
- Unallocated Program funds at the end of 2018 must be rolled into the 2019 program
 year and made available for incentives. Unallocated funding is removed from the
 Solar*Rewards program under the following circumstances:¹²
 - For program years through 2017, unallocated dollars remaining as of June 1, 2018;
 - For program years 2018 and 2019, any unallocated dollars remaining as of December 31, 2019; and
 - For 2020 and later program years, any unallocated dollars remaining as of December 31 of the given program year.
- The financial incentive for system production must be paid for ten years beginning with system commissioning;
- The Company must file a plan with the Deputy Commissioner of Commerce to operate the program and the Company may not operate the program until it is approved by the Deputy Commissioner; and
- Under Minn. Stat. § 216B.1641, a solar garden is eligible for this incentive program.

Table 1. Solar*Rewards Program Appropriation Schedule

PROGRAM YEAR	CURRENT	PREVIOUS
	APPROPRIATION	APPROPRIATION
2014	\$5,000,000	\$5,000,000
2015	\$5,000,000	\$5,000,000
2016	\$5,000,000	\$5,000,000
2017	\$5,000,000	\$5,000,000
2018	\$15,000,000	\$5,000,000
2019	\$10,000,000	0
2020	\$10,000,000	0
2021	\$5,000,000	0
Total	\$60,000,000	\$25,000,000

¹² Revisions to Minn. Stat. § 116C.7792 in 2018 override the Deputy Commissioner's order that the Company roll cumulative unspent allocations into the next program year's incentive allocations for each program year.

II. DEPUTY COMMISSIONER'S ANALYSIS

The Deputy Commissioner appreciates the *Report, Supplement*, and *Comments* filed by the Company, the *Comments* submitted from several parties, and Staff's recommendations.

Within the *Notice of Completion*¹³, Staff sought comment from Xcel and other stakeholders about the program open date, whether there is other public data related to the program that would be useful to report, and whether the low-income program plan submitted by the Company provides a reasonable approach to increase program participation by underresourced customers. Staff welcomed comments regarding other aspects of the Solar*Rewards program as well.

The Company, Fresh Energy, and Grid Alternatives commented on August 15, 2018. These *Comments* and the *Supplement* filed by the Company on September 25, 2018 were considered by Staff in the *Proposed Decision*.

Staff's *Proposed Decision*¹⁴ included several recommendations for modifying the program in order to maximize the use of available funds. *Reply Comments* to the *Proposed Decision* were invited. *Reply Comments* contained additional recommendations to modify the program.

The *Proposed Decision* and the numerous *Comments* received are considered by the Deputy Commissioner below.

A. LOW-INCOME PROGRAM

In the 2017 Decision, the Deputy Commissioner included an order point as follows:

The Deputy Commissioner directs the Company to develop recommendations for the establishment of scheduled incentive adjustments for Solar*Rewards. The recommendations may be submitted as part of the Company's 2017 annual report due June 1, 2018 or as a separate filing prior to the annual report. Deputy Commissioner directs Department staff to manage the process of accepting public comments.

The Company's Annual Report, Supplement, and Letter of Clarification included details for a proposal to create a low-income program as part of Solar*Rewards. The Company, responding parties, and Staff supported the development of a low-income program as part of Solar*Rewards. Within its Supplement, the Company described engagement with stakeholders to identify principles for serving low-income customers with the program, and confirmed that the Company has adopted these principles as part of the program's objectives. The four objectives were meeting existing guidelines for the Solar*Rewards program, following statutory

¹³ Notice of Completion. Solar*Rewards Docket No. E002/M-13-1015 Jul 20, 2018.

¹⁴ Proposed Decision. Solar*Rewards Docket No. E002/M-13-1015. October 12, 2018.

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requirements, causing "no harm", and providing benefit to low-income customers either directly or indirectly. The Deputy Commissioner agrees with these principles.

The Company's low-income proposal and *Comments* covered several elements as described below.

Carve Out and Cap

The Company proposed a low-income carve out of up to 10 percent in its *Annual Report* and noted in the *Supplement* that this amounts to an approximate minimum of \$880,000 in 2019. The Company proposed a maximum of 20 percent per stakeholder input gained through in person meetings.

Reply Comments from the Minnesota Solar Energy Industries Association (MnSEIA) included recommendations that for the first year of the low-income program, the carve out be capped at 10 percent, rather than 20 percent of total funding with the expectation to revisit the allocation cap for future program years.

Fresh Energy submitted *Reply Comments* ¹⁵ that the organization strongly disagrees with the carve-out and cap as proposed because the "imposition of both a carve-out and a cap unnecessarily limits the sub-program." Fresh Energy recognized that the carve-out is intended to respond to solar installer concerns regarding limited overall program capacity, but expressed concern that the number was arbitrarily determined without knowing actual market demand. Fresh Energy did not support a budgetary cap of the low-income program proposal and suggested that if the carve out and cap are adopted, the Department direct Xcel to include information regarding the number of applications and approved projects relative to the carve-out/cap in its annual status reports, so that the budgetary allocations can be adjusted in future program years if necessary.

Grid Alternatives recommended a carve out of at least 40 percent of annual program funds for the low-income program given that the Program has not historically served low-income customers adequately. Grid Alternatives noted that low-income customers face the greatest barriers to solar access and stand to benefit most from solar. Grid Alternatives encouraged the Company and Department staff to work to ensure that the low-income program continue for at least 10 years rather than sunset in 2021.¹⁶

The Deputy Commissioner appreciates the perspectives of the various stakeholders and acknowledges the challenge of balancing needs and goals within the limits of the program's resources. The Company's proposed carve-out and cap as presented within the *Supplement* seems to be a reasonable starting point with a minimum of 10 percent to a maximum of 20 percent in 2019. The Deputy Commissioner agrees with the proposed reporting metric suggested by Fresh Energy as well.

¹⁵ Fresh Energy Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 29, 2018.

¹⁶ Grid Alternatives Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 29, 2018.

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A minimum 10 percent allocation must be reserved for low-income program until September 1 of each year after which time unclaimed allocations would be released for use by the overall Solar*Rewards program with a maximum of 20 percent available in 2019.

Eligibility

The Company's *Supplement* to the *Annual Report* ¹⁷ provided details on proposed eligibility criteria for single-family homes, multi-family dwellings and for organizations serving underresourced clients as follows:

1. Residential – Single Family Households

The qualification for a single family home is eligibility for the Low-Income Home Energy Assistance Program (LIHEAP) or participation in the Low-Income Weatherization Assistance Program (WAP). The Company will verify whether or not the customer is receiving LIHEAP benefits. If no benefits are noted in our billing system, the Company will request the customer sign a release to provide their information to the Department of Commerce for review against their listing of eligibility for these programs. The Company and Department of Commerce will continue to work out a specific process for these tasks while committing to timely advancing these applications. Verification by the installer that low-income benefits will be received by the customer will be required as defined above.

2. Multi-Family

Solar*Rewards applications for multi-family buildings will be reviewed based on the number of units within the property and will closely resemble those requirements under our Conservation Improvement Program.

a. 2-4 unit properties

As such the qualifications will require that 50 percent or more units are eligible for either LIHEAP or WAP. We will thus follow the process described above under residential for these households for determining eligibility. If the solar system is set up with net metering directly to individually metered customer units, the system would qualify for residential incentives under the criteria listed above with each customer requiring a separate application. If it is set up otherwise, commercial or solar garden incentives could apply.

b. 5+ unit properties

Properties of five or more units will be required to show that 66 percent or more of the units are rented to tenants with an annual income less than or equal to 60 percent of the area median income. We will use either the Low Income Renter Certification listing or WAP documentation to demonstrate that LI households occupy the appropriate threshold of units within a building to qualify. Master metered properties and common areas will qualify for the Solar*Rewards incentive associated with their class of service, this will typically be the commercial rate. These properties also could

¹⁷ Supplement to 2017 Annual Report Solar*Rewards Docket No. E002/M-13-1015 Sep 25, 2018.

consider operating as a community solar garden with low-income resident subscribers.

- Low Income Renter Certification: Minnesota statute allows rental properties subsidized under a federal or state government program or meeting certain rent and income restrictions to be taxed at a lower rate. Property owners apply to the Minnesota Housing Finance Agency (MN Housing) for Low Income Rental Classification (LIREC) and MN Housing provides certification to local assessors that a property qualifies. MN Housing compiles a LIRC Assessor Report annually, in May, of all properties that have LIRC status. The LIREC Assessor Report indicates the portion of low-income units in a property. The Company will compare those customers seeking low-income incentives to the LIREC Assessors Report.
- WAP: The U.S. Department of Energy (DOE) publishes lists of multi-family rental properties that are prequalified for the WAP based on tenant income data collected annually by the federal government. Any building on the current DOE list is eligible for participation in Solar*Rewards utilizing the low-income incentive levels. In addition, at the time of application, multi-family low-income projects will be required to provide an explanation of how renters are directly receiving solar benefits at the beginning of the application process. Annual verification reporting will be required for five years to show that solar benefits continue to be passed on to qualifying low-income customers. Failure to meet these requirements following a 30-day cure period will result in withholding future incentive payments so as to effectively have a prorated claw back of upfront incentive provided for the project until we have recovered that portion of the up-front incentive prorated for that period of time associated with the non-compliance.

3. Non-profits/Government Installations

The Company wants to make available low-income incentives under the Solar*Rewards program for organizations working to provide benefit to these households through specific services. Commercial customers will be eligible for this funding if they can show that 50 percent or more of the anticipated production is for their constituents who meet LIHEAP requirements or another pre-approved metric. We will require the submission of a 501(c) (3) form or similar statement, mission statement and proof of low-income constituency. For example, a school may provide and verify the percentage of students that receive free/reduced lunch, with at least 50 percent of the constituency meeting that threshold. We will require that documentation is provided by parties prior to project approval or receiving a funding letter Annual verification reporting will be required for five years to show that solar benefits continue to be passed on to qualifying low-income customers. Failure to meet these requirements following a 30-day cure period will result in withholding future incentive payments so as to effectively have a prorated claw back of upfront incentive provided for the project until we have recovered that portion of the up-front incentive prorated for that period of time associated with the non-compliance.

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The Company noted its intent to work with the Department to verify eligibility. The Department does not have complete access to eligibility verification data as described by the Company, particularly in the area of multi-family housing. Therefore, the Department requests support from state agency, Minnesota Housing, in the area of multi-family eligibility.

Grid Alternatives expressed concern that the eligibility guidelines weren't inclusive enough and recommended that an income threshold such as area median Income, or a review process that can consider and periodically accept additional programs or services that automatically qualify low-income customers for program eligibility.¹⁸

MnSEIA recommended that multi-family participants under the low-income program should not only forfeit future incentive payments, but also return upfront incentive money if they fail to meet the requirements set forth to show that the appropriate percentage of the energy savings benefit is going to actual tenants during the first five years.¹⁹

Grid Alternatives, Minnesota Housing and Minnesota NAHRO requested that indirect benefits be permitted to count for eligibility, and that the program should allow low-income multifamily projects to document any benefits that renters will see from a solar installation.²⁰

Fresh Energy, Minnesota Housing, and Minnesota NAHRO responded that Xcel's proposed low-income didn't align with existing Department guidance related to low-income Conservation Improvement Program (CIP) programs in 5+ unit multifamily buildings.²¹

The Company filed a *Letter of Clarification*²² on November 5, 2018 stating:

We did not intend to exclude the Use Restriction from our low-income eligibility; therefore, we would propose adjusting our criteria to accepting proof of eligibility using the following: 1) LIHEAP eligibility; 2) WAP eligibility; 3) Low-Income Renter Certification; and 4) Use Restriction.

The Deputy Commissioner appreciates the thoroughness of the Company's proposal and comments from all parties and agrees with the Company's eligibility proposal as described in the Letter of Clarification (e.g. to also include eligibility per use restriction documentation in keeping with CIP low-income program eligibility.)

The Deputy Commissioner appreciates the recommendation that multifamily participants should return upfront incentive funds as well as forfeit future incentive payments if they fail to demonstrate benefit to low-income residents and clients. However, based on experience with the CIP low-income program, there is not a history of concern, and it seems unnecessary to

¹⁸ Grid Alternatives Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 29, 2018.

¹⁹ MnSEIA Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 29, 2018.

²⁰ Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 29, 2018.

²¹ Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 29, 2018.

²² Xcel Clarification Letter. Solar*Rewards Docket No. E002/M-13-1015 Nov 5, 2018.

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include this provision at this time. The Deputy Commissioner would ask that the Company notify Commerce if it detects issues with benefits not flowing to low-income clients.

Further, it is appropriate for to allow low-income multifamily projects to document benefits beyond monetary that renters will see from a solar installation.

The Deputy Commissioner approves the Company's proposal for eligibility determination as described in its *Supplement*²³ and clarified in its *Letter*²⁴ dated November 5, 2018. The Deputy Commissioner directs Department Staff to coordinate with Xcel and Minnesota Housing to identify a process for eligibility verification in a way that results in timely processing of applications.

Reporting

Staff recommended that a low-income program be adopted as part of Solar*Rewards, as proposed, subject to favorable support in the final *Reply Comments*, and recommended that annual reports include the following information:

- A list of projects that applied under the LI program;
- Category of project (single family residential, multi-family, non-profit)
- Community solar (Y/N)
- Corresponding new capacity;
- Status (Approved, Denied, Withdrawn, Completed)
- Energy production by year;
- Participant system costs;
- The criteria under which mission-oriented non-profit and government entities were approved; and
- Any special issues or successes for the previous year

The Deputy Commissioner appreciates the Company's expressed willingness in *Reply Comments* to provide additional reporting for the low-income program and agrees with Staff's recommendations with the inclusion of two additional data points.

In addition to the general program reporting requirements, the Deputy Commissioner requires low-income program reporting to include the following as part of future *Annual Reports*:

- Number and type of applications and total capacity on the low-income program waiting list, if applicable
- The criteria under which mission-oriented non-profit and government entities were approved

²³ Supplement to the Annual Report Solar*Rewards Docket No. E002/M-13-1015 Sep 25, 2018.

²⁴ Clarification Letter. Solar*Rewards Docket No. E002/M-13-1015 Jun 29, 2018.

Low-Income Program Incentive Levels

Statute requires the Deputy Commissioner to justify any increase in incentive levels under the Program.²⁵

Any plan approved by the commissioner of commerce must not provide an increased incentive scale over prior years unless the commissioner demonstrates that changes in the market for solar energy facilities require an increase.

By necessity, establishing a low-income program requires an increase in incentives relative to standard incentive offerings. In its *Annual Report*²⁶, the Company noted:

...approximately six percent of residential solar applications for Solar*Rewards and Made in Minnesota are from customers identified as being located in financially strained neighborhoods and that participating in solar energy is a challenge for many customers. The Company identified challenges including the lack of up-front capital for projects, credit challenges, older housing stock, home ownership, prior experience with predatory lending organizations, and a lack of understanding regarding options that may be available to them.²⁷

The Deputy Commissioner agrees with Staff that the Company's analysis of the market justifies the need for additional incentive levels to allow under-resourced households and the organizations that serve them easier access to solar.

The Company proposed incentive levels in its *Supplement*²⁸ on Sept 25, 2018 as shown in Table 2.

Table 2. Summary of proposed incentive levels for a new 2019 low-income program

	Production Incentive per kWh	Up-front Incentive \$/W
Low-Income Residential	\$0.07	\$2.00
Low-Income Non-Profit and Multi-family (serving low-income customers)	\$0.05	\$1.00
Low-Income Solar Garden	\$0.05	\$0.50

²⁵ Minn Statutes 116C.7792 2017

²⁶ 2017 Annual Report. Solar*Rewards Docket No. E002/M-13-1015 Jun 29, 2018.

²⁷ 2017 Annual Report. Solar*Rewards Docket No. E002/M-13-1015 Jun 29, 2018.

²⁸ Supplement to 2017 Annual Report. Solar*Rewards Docket No. E002/M-13-1015 Sep 25, 2018.

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Fresh Energy submitted *Reply Comments*²⁹ that the organization supports Xcel's proposed incentive levels for the low-income subprogram. GRID expressed concern that the proposal may not provide an incentive adequate to grant access to financing for low-income participation.

The Deputy Commissioner appreciates the input from the Company and parties on incentive levels and agrees with the Company's proposal for a combined upfront incentive along with a production incentive. The Deputy Commissioner believes that the non-profit, multi-family and solar garden incentives should align with commercial incentive levels of \$0.06 per kWh approved in Section II. B. of this *Decision* for 2019 and understands that further adjustment may be recommended for program year 2020 depending on program participation.

The Deputy Commissioner approves a combination of up-front and performance-based incentives for the low-income program as follows:

	2019 Production Incentive per kWh	2019 Up-front Incentive \$/W
Low-Income Residential	\$0.07	\$2.00
Low-Income Non-Profit and Multi-family (serving low-income customers)	\$0.06	\$1.00
Low-Income Solar Garden	\$0.06	\$0.50

Community Solar Garden Subscription Eligibility

Grid Alternatives promoted the ability to apply Solar*Rewards incentives to any community solar garden subscription.

In considering this recommendation, the Deputy Commissioner believes that the intent of Grid Alternatives is to extend Solar*Rewards eligibility to cases when the community solar garden size exceeds the 40 kW limit. However, it is a Department priority that Solar*Rewards continue to incentivize small residential and commercial systems of 40 kW or less. While community solar is eligible, the aggregate capacity limit of 40 kW is maintained.

B. INCENTIVE LEVEL

The *Decision* dated Nov 30, 2017 contained Order Point 6: ³⁰

The Deputy Commissioner directs the Company to develop recommendations for the establishment of scheduled incentive adjustments for Solar*Rewards. The

²⁹ Fresh Energy Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 29, 2018.

³⁰ Deputy Commissioner's Decision. Solar Rewards Docket 13-1015. Nov 30, 2017.

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recommendations may be submitted as part of the Company's 2017 annual report due June 1, 2018 or as a separate filing prior to the annual report. Deputy Commissioner directs Department staff to manage the process of accepting public comments.

On September 25, 2018, the Company filed a *Supplement to the Annual Report* that included the incentive levels summarized in Table 3.

Table 3. Summary of 2018 and proposed 2019 incentive levels

	2018 Incentive per kWh	2019 Proposed Production Incentive per kWh	2019 Proposed Up-front Incentive \$/W
Residential Systems	\$0.08	\$0.07	N/A
Low-Income Residential	\$0.08	\$0.07	\$2.00
Low-Income Non-Profit and Multi-family (serving low-income customers)	\$0.08	\$0.05	\$1.00
Low-Income Solar Garden	\$0.08	\$0.05	\$0.50
Commercial Systems (including Solar*Rewards with Solar*Rewards Community Gardens)	\$0.08	\$0.05	N/A

In addition, the Company's Letter of Clarification³¹ affirmed the process for incentive changes.

...for a project approved in 2018 at a \$0.08/kWh incentive level, we allocate budget for ten years of incentive payout from that year's incentive budget. Current contractual obligations will not be altered based on an incentive change at issue here. Only applications that have a signed Solar*Rewards contract with the new incentive rate will be subject to the change.

Staff's *Proposed Decision*³² recommended that the decision on setting reduced incentive levels take into consideration *Reply Comments* when deciding whether to approve the proposed incentive levels. Staff agreed with the Company that there should be differentiation in commercial and residential incentive levels. Staff questioned if the November 14 timeline for the Deputy Commissioner's *Decision* allowed adequate lead-time for the solar industry and consumers to respond to and plan for the proposed reduction in incentive levels. Additionally, Staff requested clarification from the Company as to whether a reduction in incentive levels will require a modification to the tariff and result in program start delays.

³¹ Xcel Letter. Solar*Rewards Docket No. E002/M-13-1015 Nov 5, 2018.

³² Proposed Decision. Solar*Rewards Docket No. E002/M-13-1015 Oct 12, 2018.

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In *Reply Comments,* Xcel affirmed its position on the proposed incentives in Table 3 and described the anticipated process for tariff changes, including incentive adjustment as taking 30 days from the time of filing if no objections are received during PUC's comment period.

The Company plans on launching our low-income program and new incentive levels beginning in 2019 once we have the approval of the Minnesota Public Utilities Commission (Commission). Commission approval is needed prior to making tariff changes or entering into an amendment to the current Solar*Rewards tariff contracts. The Commission has established two different paths for approval: (1) approval by written order from the Commission to revise our tariffs; or (2) approval through the 32 day no-objection process for an amendment to a Solar*Rewards contract as established in the Commission's September 25, 2015 Order in Docket No. E002/M15-650.

Our contemplated approach is to make two filings. One filing would be a proposed Solar*Rewards contract amendment under the 32 day process that would offer a contract amendment so as to implement in a timely manner the Deputy Commissioner's Decision for the program during the 2019 funding cycle. The second filing would be a petition to revise our Section 9 tariffs with the Deputy Commissioners' Decision.

The Commission's September 25, 2015 Order in Docket No. E002/M-15-650 permits the Company to proceed with amended Solar*Rewards Contracts 32 days after they are filed with the Commission if all three of the following conditions are met:

- 1. The filing amends a first or second generation Solar*Rewards Contract;
- 2. The filing includes a red-lined version showing the changes to the standard contract; and
 - 3. No objection or intent to object is filed within 30 days of the filing.

If in late November we file such a contract amendment that aligns with the Deputy Commissioners' Decision, and there is no objection within 30 days of filing, this contract amendment would allow us to open the program on January 7, 2019, the first Monday in the new year. We would view this as a short term process, to be available while we await a Commission order on our petition.³³

Minnesota Resident, Larry Etkin expressed disappointment in the proposal to reduce incentive levels for residential customers and the reduced affordability it will provide retirees and others to install solar.³⁴

iDEAL Energies supported the proposed incentive reductions with a caveat that the incentive adjustment of commercial solar arrays is too drastic when adjusted with the cost to develop commercial solar in Minnesota. iDEAL stated that national statistics for cost as a means for benchmarking in Minnesota. iDEAL cited designing for snow and wind loads, building permits, a short construction season, and labor shortages all add cost to solar in Minnesota. iDEAL

³³ Xcel Energy Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 25, 2018.

³⁴ Larry Etkin. Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 29, 2018.

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recommended an incentive level of \$0.06 per kWH for commercial projects under the program.³⁵

MnSEIA requested that if incentive rates are adjusted in the future that the Department and Xcel would invite stakeholder discussion in advance of any planned changes.

The Deputy Commissioner agrees that residential and commercial incentive levels should be differentiated with residential being reduced to \$0.07 effective in 2019. The concern regarding access to solar raised by Mr. Etkin may be addressed in part by the development of a low-income program.

The Deputy Commissioner recognizes that there are special considerations when developing solar in Minnesota as described in iDEAL Energy's *Comments* and that the timeline for the Decision allows limited time for market adjustments. The Deputy Commissioner believes that a 25% reduction in commercial incentive levels to \$0.06 per kWh is a reasonable decrease given the timeline for 2019, and encourages the Company to continue to work with stakeholders on any future incentive level adjustments as requested by MnSEIA.

The Deputy Commissioner directs Xcel to adopt incentive levels as follows for Program Year 2019:

	2019 Production Incentive per kWh	2019 Up-front Incentive \$/W
Residential Systems	\$0.07	N/A
Low-Income Residential	\$0.07	\$2.00
Low-Income Non-Profit and Multi-family (serving low-income customers)	\$0.06	\$1.00
Low-Income Solar Garden	\$0.06	\$0.50
Commercial Systems (including Solar*Rewards with Solar*Rewards Community Gardens)	\$0.06	N/A

³⁵ iDEAL Energies. Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 29, 2018.

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C. REPORTING ENGINEERING REQUIREMENTS FOR INTERCONNECTION

Within the *Notice of Completion*, Staff requested input on whether there is other public data related to Solar*Rewards that would be useful to include in the annual report.³⁶

Fresh Energy requested reporting under Solar*Rewards for distribution system upgrades,³⁷ and the Company offered to include additional reporting if not duplicative in its *Supplement*. Fresh Energy proposed the following reporting requirement:

Did the engineering review trigger distribution upgrades? (Y/N)

- If yes, what was the estimated cost presented to the interconnecting customer?
- If yes, what was the final cost paid by the interconnecting customer?

Staff agrees that distribution upgrades specified as a condition of interconnection and the associated costs are a valuable metric that could provide a public benefit for other customers considering interconnection of a solar project. Staff requested a summary of upgrades to utility infrastructure as a condition of interconnection in 2017 under Solar*Rewards as an information request.³⁸

The Company responded that its online application management system does not track this information and providing this information would have required a manual review of over 580 applications.³⁹

Staff's *Proposed Decision* included a recommendation that for each Solar*Rewards application that applies for interconnection, beginning in 2019, the Company report the following information as part of future annual reports.

Did engineering review result in distribution upgrades to utility distribution equipment to be paid by the customer? (Y/N)

- If yes, what was the estimated cost presented to the customer?
- If yes, what was the final cost paid by the interconnecting customer?

In *Reply Comments*, the Company stated that additional tracking and reporting require additional fields to be added to their application management system and that additional analysis and reporting opportunities exist on a forward looking basis once our system and tools are created and enhanced to allow for the collection of this additional data.

The Company opposed Staff's recommendation regarding additional reporting.

³⁶ Notice of Completion. Solar*Rewards Docket No. E002/M-13-1015 Jul 20, 2018.

³⁷ Fresh Energy Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Aug 15, 2018.

³⁸ Information Request No. 2. Docket 13-1015. Aug 17, 2018.

³⁹ Response to Information Request No. 2. Docket 13-1015. Aug 27, 2018.

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The Commission and several parties have recently completed an exhaustive process which identified requisite reporting related to interconnection which resulted in the Commission's August 13, 2018 Order in Docket No. 16-521. We believe that this recommendation is out of step with the conclusions reached through this process since it would require development of data gathering and tracking that are not part of future tracking for the Minnesota interconnection process.

Fresh Energy supported Staff's position that additional reporting is necessary beginning in 2019 and disagreed with the Company's position that the additional reporting is unnecessary.

Program reporting was not determined by the Commission's August 13, 2018 Order in Docket No. 16-521.Xcel's opposition to Staff's Recommendation No. 3. for further Solar*Rewards reporting based on the Commission Order on interconnection standards (Docket No. 16-521) is unfounded1. The reporting requirements that resulted from the Commission's August 13 Order were designed for interconnection compliance and transparency and intentionally excluded program reporting. Additional reporting designed to evaluate program compliance, efficiency, customer experience, cost, etc. is appropriate and encouraged.⁴⁰

MnSEIA agreed with the need for reporting on distribution upgrades, but encouraged weekly reporting on the program website for more transparency.

More information is certainly needed, but we feel it should go much further than only annual reporting requires. ...Weekly reports can automatically be sent out to the installer community or a specific listsery. This can be an automatic report that is sent out through your Salesforce Database. No additional person-power would be required. As part of these weekly reports, Xcel should not only show if there is additional information requested, but also the details of what additional information is requested. In many cases, additional information requests are not for electrical upgrades but are rather for wrong names on electric bills, or incorrect spellings. These issues should be shared with the installer community: not only to help minimize them, but also to make this process smoother going forward.

The weekly reports should also list all interconnection upgrades, what the needed upgrades are, and a breakdown of the costs. Currently the customer or the installer is not provided with a breakdown of upgrade costs. In many cases the description of work to be performed is listed as "other" and then described as "transformer upgrades due to solar installation." There is concern that some consumers are paying more than others for similar upgrades and this suggested change would allow for a more transparent process and better pricing for all Xcel customers.

Additionally, the weekly reports should include each applicants reserved rebate dollars and or expected year 1 production, as well as, their past actual rebate dollars received.

⁴⁰ Fresh Energy Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 29, 2018.

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This would enable the installation community to replicate Xcel's rebate math and would benefit the industry generally. MnSEIA contends that weekly reports are important for our members, and their customers to see how long it is taking projects to get through the interconnection process and the installation stage. This reporting requirement will ensure that Xcel is getting projects through the interconnection process in the required 15 business days, but would also will allow Xcel to see projects that should be cancelled or removed due to poor installer paperwork submission. This level of transparency will help both parties involved to be better at their own processes.⁴¹

The Deputy Commissioner notes that there have been on-going discussions as part of this docket regarding the concerns about the frequency of requirements for upgrades to utility's distribution infrastructure. Additionally, the Company has a proposal to make a significant investment to enhance its online application system in the next two program years. The Deputy Commissioner believes that the value of this information would contribute deeper understanding and valuable real-world interconnection data.

The Deputy Commissioner directs the Company to publish the following information by OID 1) online and 2) in future annual reports for each Solar*Rewards application that applies for interconnection:

- Did engineering review result in distribution upgrades to utility distribution equipment to be paid by the customer? (Y/N)
 - If yes, what was the estimated cost presented to the customer?
 - If yes, what was the final cost paid by the interconnecting customer?

D. IT ENHANCEMENT

The *Annual Report*⁴² filed by the Company on Jun 29, 2018 included a request for Information Technology upgrades.

The Company noted that as part of the Minnesota General Interconnection Standards approved by the Public Utilities Commission in Hearings on May 24, 2018, 43 many current practices for reviewing interconnection applications will require complete overhaul. The Company further stated that the Solar*Rewards online application system supports all distributed generation application requests and in order to comply with the new Interconnection standards, the Company proposed increasing administrative spending in 2018 and 2019 as outlined in Tables 4 and 5.

⁴¹ MnSEIA Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 29, 2018.

⁴² 2017 Annual Report. Solar*Rewards Docket No. E002/M-13-1015 Jun 29, 2018.

⁴³ Interconnection and Operation of Distributed Generation Facilities Established under Minn. Stat. § 215B.1611, Docket No. E999/CI-16-521

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Table 4: 2019 Solar*Rewards Estimated Administration Budget

		BUDGET
Administration	Labor	\$ 40,000
Administration	It Expense/Software Licenses	\$ 200,000
	Marketing/Promotion	\$ 60,000
	It Enhancements	\$ 600,000
	Total	\$ 900,000

Table 5: 2019 Solar*Rewards Estimated Administration Budget

		Budget	
	Labor	\$	40,000
Administration	IT Expense/Software Licenses	\$	200,000
	Marketing/Promotion	\$	60,000
	IT Enhancements	\$	900,000
	Total	\$ 1,	,200,000

Staff noted that the request represents a significant increase for program administrative costs, with a combined total of \$1.9 million in 2018 and 2019 for Information Technology (IT) enhancements and other IT expenses to comply with pending PUC rule updates impacting interconnection process requirements.

In program year 2018, the IT portion of the proposed budget is \$800,000 and increases to \$1.1 million in 2019. Staff noted that in 2019, the statutory appropriation decreases from \$15 million in 2018 to \$10 million, and the proposed IT expenses would represent more than 10 percent of the budget appropriation for the year.

The Company stated it believes that "these expenses should be funded because they are reasonable in scope, necessary for the successful implementation of the MN DIP and MN DIA for the Solar*Rewards program, and to the benefit of ratepayers." 44

⁴⁴ Xcel Energy Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 25, 2018.

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Staff recommended that the Deputy Commissioner review the Company's response to budget questions when determining the portion of IT enhancement expenditures that should be sourced from the Solar*Rewards budget.

In *Reply Comments*⁴⁵, the Company provided a summary table as requested by Staff, showing that 83 percent of total applications and 13 percent of capacity processed through its online application system are associated with Solar*Rewards. It further stated the following.

In its Proposed Decision, Staff recommends that the Company recover a portion of administrative costs for IT enhancements from Solar*Rewards proportional to the capacity associated with applications to the program for 2018 and 2019. Project capacity is not a useful metric for allocating the cost associated with creating and supporting an online application management system since the cost of creating the system for a 1 kW project is the same as enabling a similar application for 1 MW.

Fresh Energy stated that it supports the Company's plans to overhaul the design of the online application management tool and requested that this be accomplished through a collaborative process that includes installers and other interested stakeholders. Fresh Energy highlighted the priority of simplification, efficiency, and cost-savings for Xcel and for applicants. Installers and other interested stakeholders should be invited to participate fully in design, user interface, testing stages, and rollout of the new management system.⁴⁶

The Deputy Commissioner agrees with Staff that the IT upgrade costs should not be 100% borne by the Solar*Rewards program, but agrees with Xcel that the allocator should be number of applications, rather than capacity, since processing individual applications is the cost driver. The Deputy Commissioner also encourages the Company to include the solar installation community in the modification of the online application system.

The Deputy Commissioner approves 83 percent of the planned IT Enhancement budget requests for 2018 and 2019 under the conditions described, including that the Company will look for and report on any opportunities to distribute the costs among other appropriate funding sources, including other states, in its next two annual reports due June 1 of 2019 and 2020. The Deputy Commissioner encourages the Company to include the solar installation community in the modification of the online application system.

E. PROGRAM START DATE

In response to on Staff's recommendation to open the program for applications on the first Monday following January 1 in future program years, the Company noted in *Reply Comments*⁴⁷ that it plans to begin accepting applications for the 2019 program year on January 7, 2019.

⁴⁵ Xcel Energy Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 25, 2018.

⁴⁶ Fresh Energy Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 29, 2018.

⁴⁷ Xcel Energy Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 25, 2018.

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Deputy Commissioner directs the Company to plan for a program start date of the first Monday following January 1 in future program years. If there are circumstances that prevent meeting this timeline, the Company may seek an extension from the Deputy Commissioner.

F. NET METERING CHANGES

The Company proposed a program change that it believes will need to be adjusted in its Section 9 Tariff upon approval by the Department. Staff abstained from making a proposed decision regarding the adjustment to the rates offered for Solar*Rewards participants.⁴⁸

The Company noted that prior to July 21, 2017, there were three net metering rate schedules A50- A52. As of July 21, 2017, following a *Commission Order*⁴⁹ authorizing tariff changes, the Company updated rate schedules to include A50-A56 rates. The Company proposed to update the Solar*Rewards tariff to include these updated rate schedules to align with the tariff for applications submitted in 2019 prior to the effective date of the Minnesota Distributed Energy Resources Interconnection Process (MN DIP).

Within its *Reply Comments*⁵⁰, the Company noted that Staff abstained from making a Recommendation on the issue and requested the Deputy Commissioner to review and approve the request.

The Company anticipates filing another petition with PUC to address a number of tariff changes across all of DG tariffs, including Solar*Rewards, needed to align its tariffs with the MN DIP.

The Deputy Commissioner appreciates the Company identifying this administrative clarification with its Solar*Rewards tariff and supports the alignment of the rate options available to net energy metering customers being available to Solar*Rewards customers. The Deputy Commissioner understands that the MnDIP process being led by the Public Utilities Commission may result in other modifications, such as cost distribution for metering, that the Department would consider in its testimony and comments when invited by the PUC.

Regarding Docket 16-222 cited by the Company, the Deputy Commissioner recognizes the need for a production meter during the term of the 10-year agreement for Solar*Rewards customers. Upon the completion of the contract term, however, the Deputy Commissioner believes that a production meter should be at the election of the customer.

G. MINNESOTA LICENSING FOR SOLAR INSTALLERS

The Company proposed the introduction of additional customer protections by adding a residential installer certification:

⁴⁸ Xcel Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 29, 2018.

⁴⁹ Docket No. E002/M-16-222

⁵⁰ Xcel Energy Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 25, 2018.

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Minnesota Licensing for Solar Installers: We propose a new provision in the Solar*Rewards tariff to require that applications submitted by an installer for residential properties may only be submitted by a Minnesota licensed residential building contractor. The Company will perform a compliance check for this once at the beginning of the application process. A residential customer need not have the developer submit the application, but may instead submit its own Solar*Rewards application in which case we will not check to determine whether the customer's installer is so licensed. We have worked with MNSEIA and various other developers, and consulted with the Department of Labor and Industry to verify the benefits and requirements for particular licenses and believe that there is general agreement with this new provision, as it provides additional customer protection when project installations do not proceed as planned.⁵¹

Staff abstained from making a recommendation about the proposed licensing certification requirement.

In *Reply Comments*⁵², Fresh Energy expressed concern about the proposed requirement and appreciates that Xcel's proposal is not to require a residential building contractor's license to participate in Solar*Rewards, but that only a licensed installer can act on the customer's behalf.

Fresh Energy also raised the issue of jurisdiction. Fresh Energy stated:

The jurisdictional authority of the utility for a customer-owned solar installation does not extend beyond the customer meter, particularly not for a performance-based incentive program. Therefore, it may be inappropriate for the utility to strongly incent a license for work performed behind the customer meter when that license is not required by the state. Further, if this building contractors license were required by the state for solar installations, the appropriate place for enforcement would be with the city or county permitting authority and not through an incentive or interconnection application review process.

Should the Commissioner decide to approve this request, it is our recommendation that it be made clear that this reflects special circumstance and is not intended to set precedent or indicate a change to utility jurisdiction.

The Deputy Commissioner appreciates the Company's interest in consumer protection and shares the goal. In consultation with the Department of Labor and Industry, the state agency with jurisdiction over licensing, the Deputy Commissioner supports a requirement that in addition to meeting all other licensing requirements contractors participating in the Solar*Rewards program hold a residential building contractor or remodeler license issued by the Department of Labor and Industry.

⁵¹ Supplement to Annual Report. Solar*Rewards Docket No. E002/M-13-1015 Sep 25, 2018.

⁵² Fresh Energy Reply Comments. Solar*Rewards Docket No. E002/M-13-1015 Oct 29, 2018.

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H. ALIGNMENT OF INCENTIVES

Staff recommended that the Company explore options for tracking how well actual incentives paid align with incentive funds reserved and report back to the Deputy Commissioner on ways to capture this important metric in its next *Annual Report*.

The Company noted it does not track reserved funding by project nor does it compare reserved funding per project to actual production of the systems. The Company agreed to review these capabilities in its 2018 Annual Report the opportunity, and noted this would require a change in its systems and tools to impact current projects and low-income projects as well.

The Deputy Commissioner believes it is good program practice to track how well reservation methodology aligns with actual incentive payments. A methodology that consistently over- or underestimates production will result in a surplus or shortage of funding over the course of the program.

The Deputy Commissioner directs the Company to include plans for tracking how well actual incentives paid aligns with incentive funding reserved in its next *Annual Report*.

III. DEPUTY COMMISSIONER'S DECISION

The Deputy Commissioner approves Xcel's 2017 Annual Report and Supplement and the Company's continued operation of Solar*Rewards subject to the following order points:

- The Deputy Commissioner approves a Low-Income program as part of Solar*Rewards as follows:
 - a. A minimum 10 percent allocation must be reserved for low-income program until September 1 of each year after which time unclaimed allocations will be released for use by the overall Solar*Rewards program with a maximum of 20 percent available in 2019.
 - b. The Deputy Commissioner approves the Company's proposal for eligibility determination as described in its *Supplement*⁵³ and clarified in its *Letter*⁵⁴ dated November 5, 2018. The Deputy Commissioner directs Department Staff to coordinate with Xcel and Minnesota Housing to identify a process for eligibility verification in a way that results in timely processing of applications.
 - c. In addition to the general program reporting requirements, the Deputy Commissioner requires low-income program reporting to include the following as part of future *Annual Reports*:
 - Number and type of applications and total capacity on the low-income program waiting list, if applicable

⁵³ Supplement to Annual Report. Solar*Rewards Docket No. E002/M-13-1015 Sep 25, 2018.

⁵⁴ Clarification Letter. Solar*Rewards Docket No. E002/M-13-1015 Sep 25, 2018.

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- The criteria under which mission-oriented non-profit and government entities were approved
- d. The Deputy Commissioner approves a combination of up-front and performance-based incentives for the low-income program for 2019 as follows:

	2019 Production Incentive per kWh	2019 Up-front Incentive \$/W
Low-Income Residential	\$0.07	\$2.00
Low-Income Non-Profit and Multi-family (serving low-income customers)	\$0.06	\$1.00
Low-Income Solar Garden	\$0.06	\$0.50

2. The Deputy Commissioner directs Xcel to adopt incentive levels as follows for Program Year 2019:

	2019	2019
	Production	Up-front
	Incentive	Incentive
	per kWh	\$/W
Residential Systems	\$0.07	N/A
Low-Income Residential	\$0.07	\$2.00
Low-Income		
Non-Profit and Multi-family	\$0.06	\$1.00
(serving low-income		
customers)		
Low-Income Solar Garden	\$0.06	\$0.50
Commercial Systems		
(including Solar*Rewards	\$0.06	N/A
with Solar*Rewards		
Community Gardens)		

- 3. The Deputy Commissioner directs the Company to publish the following information by OID 1) online and 2) in future annual reports for each Solar*Rewards application that applies for interconnection:
 - Did engineering review result in distribution upgrades to utility distribution equipment to be paid by the customer? (Y/N)
 - If yes, what was the estimated cost presented to the customer?
 - If yes, what was the final cost paid by the interconnecting customer?

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- 4. The Deputy Commissioner approves 83 percent of the planned IT Enhancement budget requests for 2018 and 2019 under the conditions described, including that the Company will look for and report on any opportunities to distribute the costs among other appropriate funding sources, including other states, in its next two annual reports due June 1 of 2019 and 2020. The Deputy Commissioner encourages the Company to include the solar installation community in the modification of the online application system.
- 5. Deputy Commissioner directs the Company to plan for a program start date of the first Monday following January 1 in future program years. If there are circumstances that prevent meeting this timeline, the Company may seek an extension from the Deputy Commissioner.
- 6. The Deputy Commissioner appreciates the Company's interest in consumer protection and shares the goal. In consultation with the Department of Labor and Industry, the state agency with jurisdiction over licensing, the Deputy Commissioner supports a requirement that in addition to meeting all other licensing requirements contractors participating in the Solar*Rewards program hold a residential building contractor or remodeler license issued by the Department of Labor and Industry.
- 7. The Deputy Commissioner directs the Company to include plans for tracking how well actual incentives paid aligns with incentive funding reserved in its next *Annual Report*.

BY ORDER OF THE DEPUTY COMMISSIONER

William Grant

Deputy Commissioner,

Minnesota Department of Commerce,

Division of Energy Resource

CERTIFICATE OF SERVICE

I, Lynette Sweet, hereby certify that I have this day served copies of the foregoing document on the attached list of persons.

- <u>xx</u> by depositing a true and correct copy thereof, properly enveloped with postage paid in the United States mail at Minneapolis,
 Minnesota; or
- <u>xx</u> by electronic filing.

Docket Nos.: E002/M-13-1015 & E002/M-16-222

Dated this 14th day of December.

Lynette Sweet
Regulatory Administrator

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Michael	Allen	michael.allen@allenergysol ar.com	All Energy Solar	721 W 26th st Suite 211 Minneapolis, Minnesota 55405	Electronic Service	No	OFF_SL_13-1015_Official
Michael J.	Bull	mbull@mncee.org	Center for Energy and Environment	212 Third Ave N Ste 560 Minneapolis, MN 55401	Electronic Service	No	OFF_SL_13-1015_Official
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.st ate.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_13-1015_Official
Timothy	DenHerder Thomas	timothy@cooperativeenerg yfutures.com	Cooperative Energy Futures	3500 Bloomington Ave. S Minneapolis, MN 55407	Electronic Service	No	OFF_SL_13-1015_Official
lan	Dobson	residential.utilities@ag.stat e.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_13-1015_Official
John	Farrell	jfarrell@ilsr.org	Institute for Local Self-Reliance	1313 5th St SE #303 Minneapolis, MN 55414	Electronic Service	No	OFF_SL_13-1015_Official
Sharon	Ferguson	sharon.ferguson@state.mn .us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_13-1015_Official
Jan	Hubbard	jan.hubbard@comcast.net		7730 Mississippi Lane Brooklyn Park, MN 55444	Electronic Service	No	OFF_SL_13-1015_Official
Jon	Kramer	sundialjon@gmail.com	Sundial Solar	3209 W 76th St Edina, MN 55435	Electronic Service	No	OFF_SL_13-1015_Official
David	Moe	momentums@aol.com		2825 28th Ave S Minneapolis, MN 55406	Electronic Service	No	OFF_SL_13-1015_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Ben	Passer	Passer@fresh-energy.org	Fresh Energy	408 St. Peter Street Ste 220 Saint Paul, MN 55102	Electronic Service	No	OFF_SL_13-1015_Official
David	Shaffer	shaff081@gmail.com	Minnesota Solar Energy Industries Project	1005 Fairmount Ave Saint Paul, MN 55105	Electronic Service	No	OFF_SL_13-1015_Official
Lynnette	Sweet	Regulatory.records@xcele nergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_13-1015_Official
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_13-1015_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Michael	Allen	michael.allen@allenergysol ar.com	All Energy Solar	721 W 26th st Suite 211 Minneapolis, Minnesota 55405	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
David	Amster Olzweski	david@mysunshare.com	SunShare, LLC	1774 Platte St Denver, CO 80202	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Ellen	Anderson	ellena@umn.edu	325 Learning and Environmental Sciences	1954 Buford Ave Saint Paul, MN 55108	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Christopher	Anderson	canderson@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022191	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Alison C	Archer	aarcher@misoenergy.org	MISO	2985 Ames Crossing Rd Eagan, MN 55121	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Donna	Attanasio	dattanasio@law.gwu.edu	George Washington University	2000 H Street NW Washington, DC 20052	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
John	Bailey	bailey@ilsr.org	Institute For Local Self-Reliance	1313 5th St SE Ste 303 Minneapolis, MN 55414	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Kenneth	Baker	Ken.Baker@walmart.com	Wal-Mart Stores, Inc.	2001 SE 10th St. Bentonville, AR 72716-5530	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Sara	Baldwin Auck	sarab@irecusa.org	Interstate Renewable Energy Council, Inc.	PO Box 1156 Latham, NY 12110	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Gail	Baranko	gail.baranko@xcelenergy.c om	Xcel Energy	414 Nicollet Mall7th Floor Minneapolis, MN 55401	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
lames J.	Bertrand	james.bertrand@stinson.co m	Stinson Leonard Street LLP	50 S 6th St Ste 2600 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Derek	Bertsch	derek.bertsch@mrenergy.c om	Missouri River Energy Services	3724 West Avera Drive PO Box 88920 Sioux Falls, SD 57109-8920	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Villiam	Black	bblack@mmua.org	MMUA	Suite 400 3025 Harbor Lane Nor Plymouth, MN 554475142	Electronic Service th	No	OFF_SL_16-222_Official Service List 16-222
Kenneth	Bradley	kbradley1965@gmail.com		2837 Emerson Ave S Apt CW112 Minneapolis, MN 55408	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
on	Brekke	jbrekke@grenergy.com	Great River Energy	12300 Elm Creek Boulevard Maple Grove, MN 553694718	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Sydney R.	Briggs	sbriggs@swce.coop	Steele-Waseca Cooperative Electric	2411 W. Bridge St PO Box 485 Owatonna, MN 55060-0485	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
∕lark B.	Bring	mbring@otpco.com	Otter Tail Power Company	215 South Cascade Street PO Box 496 Fergus Falls, MN 565380496	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
ony	Brunello	BADEMAIL- tbrunello@greentechleader ship.org	Greentech Leadership Group	426 17th St Ste 700 Oakland, CA 94612-2850	Paper Service	No	OFF_SL_16-222_Official Service List 16-222
Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron	200 S 6th St Ste 4000 Minneapolis, MN 554021425	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222

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Michael J.	Bull	mbull@mncee.org	Center for Energy and Environment	212 Third Ave N Ste 560 Minneapolis, MN 55401	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Jessica	Burdette	jessica.burdette@state.mn. us	Department of Commerce	85 7th Place East Suite 500 St. Paul, MN 55101	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Jason	Burwen	j.burwen@energystorage.o rg	Energy Storage Association	1155 15th St NW, Ste 500 Washington, DC 20005	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Douglas M.	Carnival	dmc@mcgrannshea.com	McGrann Shea Carnival Straughn & Lamb	N/A	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.	12700 West Dodge Road PO Box 2047 Omaha, NE 68103-2047	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Kenneth A.	Colburn	kcolburn@symbioticstrategi es.com	Symbiotic Strategies, LLC	26 Winton Road Meredith, NH 32535413	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.st ate.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_16-222_Official Service List 16-222
George	Crocker	gwillc@nawo.org	North American Water Office	PO Box 174 Lake Elmo, MN 55042	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Arthur	Crowell	Crowell.arthur@yahoo.com	A Work of Art Solar	14333 Orchard Rd. Minnetonka, MN 55345	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Stacy	Dahl	sdahl@minnkota.com	Minnkota Power Cooperative, Inc.	5301 32nd Ave S Grand Forks, ND 58201	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
David	Dahlberg	davedahlberg@nweco.com	Northwestern Wisconsin Electric Company	P.O. Box 9 104 South Pine Street Grantsburg, WI 548400009	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
James	Denniston	james.r.denniston@xcelen ergy.com	Xcel Energy Services, Inc.	414 Nicollet Mall, Fifth Floor Minneapolis, MN 55401	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Curt	Dieren	curt.dieren@dgr.com	L&O Power Cooperative	1302 S Union St Rock Rapids, IA 51246	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
lan	Dobson	residential.utilities@ag.stat e.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_16-222_Official Service List 16-222
Brian	Draxten	bhdraxten@otpco.com	Otter Tail Power Company	P.O. Box 496 215 South Cascade S Fergus Falls, MN 565380498	Electronic Service treet	No	OFF_SL_16-222_Official Service List 16-222
Kristen	Eide Tollefson	healingsystems69@gmail.c om	R-CURE	28477 N Lake Ave Frontenac, MN 55026-1044	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Bob	Eleff	bob.eleff@house.mn	Regulated Industries Cmte	100 Rev Dr Martin Luther King Jr Blvd Room 600 St. Paul, MN 55155	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Betsy	Engelking	betsy@geronimoenergy.co m	Geronimo Energy	7650 Edinborough Way Suite 725 Edina, MN 55435	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Oncu	Er	oncu.er@avantenergy.com	Avant Energy, Agent for MMPA	220 S. Sixth St. Ste. 1300 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
James C.	Erickson	jericksonkbc@gmail.com	Kelly Bay Consulting	17 Quechee St Superior, WI 54880-4421	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
John	Farrell	jfarrell@ilsr.org	Institute for Local Self-Reliance	1313 5th St SE #303 Minneapolis, MN 55414	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Sharon	Ferguson	sharon.ferguson@state.mn .us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
John	Fernandes	john.fernandes@res- americas.com	RES	11101 W. 120th Ave Suite 400 Broomfield, CO 80021	Paper Service	No	OFF_SL_16-222_Official Service List 16-222
Nathan	Franzen	nathan@geronimoenergy.c om	Geronimo Energy	7650 Edinborough Way Suite 725 Edina, MN 55435	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
John	Fuller	N/A	MN Senate	75 Rev Dr Martin Luther King Jr Blvd Room G-17 St. Paul, MN 55155	Paper Service	No	OFF_SL_16-222_Official Service List 16-222
Hal	Galvin	halgalvin@comcast.net	Provectus Energy Development llc	1936 Kenwood Parkway Minneapolis, MN 55405	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Edward	Garvey	garveyed@aol.com	Residence	32 Lawton St Saint Paul, MN 55102	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Bruce	Gerhardson	bgerhardson@otpco.com	Otter Tail Power Company	PO Box 496 215 S Cascade St Fergus Falls, MN 565380496	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Allen	Gleckner	gleckner@fresh-energy.org	Fresh Energy	408 St. Peter Street Ste 220 Saint Paul, Minnesota 55102	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Bryan	Gower	bgower@apx.com	APX, Inc.	N/A	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Timothy	Gulden	info@winonarenewableene rgy.com	Winona Renewable Energy, LLC	1449 Ridgewood Dr Winona, MN 55987	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Tony	Hainault	anthony.hainault@co.henn epin.mn.us	Hennepin County DES	701 4th Ave S Ste 700 Minneapolis, MN 55415-1842	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Todd	Headlee	theadlee@dvigridsolutions.com	Dominion Voltage, Inc.	701 E. Cary Street Richmond, VA 23219	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Duane	Hebert	duane.hebert@novelenerg y.biz	Novel Energy Solutions	1628 2nd Ave SE Rochester, MN 55904	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Kimberly	Hellwig	kimberly.hellwig@stoel.co m	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Jared	Hendricks	hendricksj@owatonnautiliti es.com	Owatonna Public Utilities	PO Box 800 208 S Walnut Ave Owatonna, MN 55060-2940	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Annete	Henkel	mui@mnutilityinvestors.org	Minnesota Utility Investors	413 Wacouta Street #230 St.Paul, MN 55101	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Shane	Henriksen	shane.henriksen@enbridge .com	Enbridge Energy Company, Inc.	1409 Hammond Ave FL 2 Superior, WI 54880	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Michael	Норре	il23@mtn.org	Local Union 23, I.B.E.W.	932 Payne Avenue St. Paul, MN 55130	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Lori	Hoyum	lhoyum@mnpower.com	Minnesota Power	30 West Superior Street Duluth, MN 55802	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Jan	Hubbard	jan.hubbard@comcast.net		7730 Mississippi Lane Brooklyn Park, MN 55444	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Casey	Jacobson	cjacobson@bepc.com	Basin Electric Power Cooperative	1717 East Interstate Avenue Bismarck, ND 58501	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
John S.	Jaffray	jjaffray@jjrpower.com	JJR Power	350 Highway 7 Suite 236 Excelsior, MN 55331	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Alan	Jenkins	aj@jenkinsatlaw.com	Jenkins at Law	2265 Roswell Road Suite 100 Marietta, GA 30062	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Richard	Johnson	Rick.Johnson@lawmoss.co m	Moss & Barnett	150 S. 5th Street Suite 1200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Nate	Jones	njones@hcpd.com	Heartland Consumers Power	PO Box 248 Madison, SD 57042	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Michael	Kampmeyer	mkampmeyer@a-e- group.com	AEG Group, LLC	260 Salem Church Road Sunfish Lake, Minnesota 55118	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Mark J.	Kaufman	mkaufman@ibewlocal949.o rg	IBEW Local Union 949	12908 Nicollet Avenue South Burnsville, MN 55337	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Jennifer	Kefer	jennifer@dgardiner.com	Alliance for Industrial Efficiency	David Gardiner & Associates, LLC 2609 11th St N Arlington, VA 22201-2825	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Julie	Ketchum	N/A	Waste Management	20520 Keokuk Ave Ste 200 Lakeville, MN 55044	Paper Service	No	OFF_SL_16-222_Official Service List 16-222
Brad	Klein	bklein@elpc.org	Environmental Law & Policy Center	35 E. Wacker Drive, Suite 1600 Suite 1600 Chicago, IL 60601	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Thomas	Koehler	TGK@IBEW160.org	Local Union #160, IBEW	2909 Anthony Ln St Anthony Village, MN 55418-3238	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Brian	Krambeer	bkrambeer@tec.coop	Tri-County Electric Cooperative	PO Box 626 31110 Cooperative W Rushford, MN 55971	Electronic Service ay	No	OFF_SL_16-222_Official Service List 16-222
Jon	Kramer	sundialjon@gmail.com	Sundial Solar	3209 W 76th St Edina, MN 55435	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Michael	Krause	michaelkrause61@yahoo.c om	Kandiyo Consulting, LLC	433 S 7th Street Suite 2025 Minneapolis, Minnesota 55415	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Michael	Krikava	mkrikava@briggs.com	Briggs And Morgan, P.A.	2200 IDS Center 80 S 8th St Minneapolis, MN 55402	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Matthew	Lacey	Mlacey@grenergy.com	Great River Energy	12300 Elm Creek Boulevard Maple Grove, MN 553694718	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Douglas	Larson	dlarson@dakotaelectric.co m	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
James D.	Larson	james.larson@avantenergy .com	Avant Energy Services	220 S 6th St Ste 1300 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Dean	Leischow	dean@sunrisenrg.com	Sunrise Energy Ventures	315 Manitoba Ave Wayzata, MN 55391	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Susan	Ludwig	sludwig@mnpower.com	Minnesota Power	30 West Superior Street Duluth, MN 55802	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Kavita	Maini	kmaini@wi.rr.com	KM Energy Consulting LLC	961 N Lost Woods Rd Oconomowoc, WI 53066	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Pam	Marshall	pam@energycents.org	Energy CENTS Coalition	823 7th St E St. Paul, MN 55106	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Samuel	Mason	smason@beltramielectric.c om	Beltrami Electric Cooperative, Inc.	4111 Technology Dr. NW PO Box 488 Bemidji, MN 56619-0488	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Erica	McConnell	mcconnell@smwlaw.com	Shute, Mihaly & Weinberger LLP	396 Hayes St San Francisco, California 94102-4421	Paper Service	No	OFF_SL_16-222_Official Service List 16-222
Dave	McNary	David.McNary@hennepin.u s	Hennepin County DES	701 Fourth Ave S Ste 700 Minneapolis, MN 55415-1842	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
John	McWilliams	jmm@dairynet.com	Dairyland Power Cooperative	3200 East Ave SPO Box 817 La Crosse, WI 54601-7227	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Thomas	Melone	Thomas.Melone@AllcoUS.com	Minnesota Go Solar LLC	222 South 9th Street Suite 1600 Minneapolis, Minnesota 55120	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Herbert	Minke	hminke@allete.com	Minnesota Power	30 W Superior St Duluth, MN 55802	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Dalene	Monsebroten	dalene@mncable.net	Northern Municipal Power Agency	123 2nd St W Thief River Falls, MN 56701	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Andrew	Moratzka	andrew.moratzka@stoel.co m	Stoel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Martin	Morud	mmorud@trunorthsolar.co m	Tru North Solar	5115 45th Ave S Minneapolis, MN 55417	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Michael	Murray	mmurray@missiondata.org	Mission:Data Coalition	1020 16th St Ste 20 Sacramento, CA 95814	Paper Service	No	OFF_SL_16-222_Official Service List 16-222
Ben	Nelson	benn@cmpasgroup.org	СММРА	459 South Grove Street Blue Earth, MN 56013	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Carl	Nelson	cnelson@mncee.org	Center for Energy and Environment	212 3rd Ave N Ste 560 Minneapolis, MN 55401	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Dale	Niezwaag	dniezwaag@bepc.com	Basin Electric Power Cooperative	1717 East Interstate Avenue Bismarck, ND 58503	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
David	Niles	david.niles@avantenergy.c om	Minnesota Municipal Power Agency	220 South Sixth Street Suite 1300 Minneapolis, Minnesota 55402	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Rolf	Nordstrom	rnordstrom@gpisd.net	Great Plains Institute	2801 21ST AVE S STE 220 Minneapolis, MN 55407-1229	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Samantha	Norris	samanthanorris@alliantene rgy.com	Interstate Power and Light Company	200 1st Street SE PO Box 351 Cedar Rapids, IA 524060351	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Jeff	O'Neill	jeff.oneill@ci.monticello.mn .us	City of Monticello	505 Walnut Street Suite 1 Monticelllo, Minnesota 55362	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Russell	Olson	rolson@hcpd.com	Heartland Consumers Power District	PO Box 248 Madison, SD 570420248	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Priti	Patel	ppatel@grenergy.com	Great River Energy	12300 Elm Creek Blvd Maple Grove, MN 55369-4718	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Dan	Patry	dpatry@sunedison.com	SunEdison	600 Clipper Drive Belmont, CA 94002	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Jeffrey C	Paulson	jeff.jcplaw@comcast.net	Paulson Law Office, Ltd.	4445 W 77th Street Suite 224 Edina, MN 55435	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Joyce	Peppin	joyce@mrea.org	Minnesota Rural Electric Association	11640 73rd Ave N Maple Grove, MN 55369	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Mary Beth	Peranteau	mperanteau@wheelerlaw.c om	Wheeler Van Sickle & Anderson SC	44 E. Mifflin Street, 10th Floor	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
				Madison, WI 53703			
ennifer	Peterson	jjpeterson@mnpower.com	Minnesota Power	30 West Superior Street Duluth, MN 55802	Electronic Service	No	OFF_SL_16-222_Officia Service List 16-222
Hannah	Polikov	hpolikov@aee.net	Advanced Energy Economy Institute	1000 Vermont Ave, Third Floor Washington, DC 20005	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
David G.	Prazak	dprazak@otpco.com	Otter Tail Power Company	P.O. Box 496 215 South Cascade S Fergus Falls, MN 565380496	Electronic Service treet	No	OFF_SL_16-222_Official Service List 16-222
Gregory	Randa	granda@lakecountrypower. com	Lake Country Power	2810 Elida Drive Grand Rapids, MN 55744	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Лаrk	Rathbun	mrathbun@grenergy.com	Great River Energy	12300 Elm Creek Blvd Maple Grove, MN 55369	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
⁄lichael	Reinertson	michael.reinertson@avante nergy.com	Avant Energy	220 S. Sixth St. Ste 1300 Minneapolis, Minnesota 55402	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
lohn C.	Reinhardt		Laura A. Reinhardt	3552 26Th Avenue South Minneapolis, MN 55406	Paper Service	No	OFF_SL_16-222_Official Service List 16-222
Kevin	Reuther	kreuther@mncenter.org	MN Center for Environmental Advocacy	26 E Exchange St, Ste 206 St. Paul, MN 551011667	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Michael	Riewer	MRiewer@otpco.com	Otter Tail Power Company	PO Box 4496 Fergus Falls, MN 56538-0496	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Robert K.	Sahr	bsahr@eastriver.coop	East River Electric Power Cooperative	P.O. Box 227 Madison, SD 57042	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Richard	Savelkoul	rsavelkoul@martinsquires.com	Martin & Squires, P.A.	332 Minnesota Street Ste W2750 St. Paul, MN 55101	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Thomas	Scharff	thomas.scharff@versoco.c om	Verso Corp	600 High Street Wisconsin Rapids, WI 54495	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Larry L.	Schedin	Larry@LLSResources.com	LLS Resources, LLC	332 Minnesota St, Ste W1390 St. Paul, MN 55101	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Christopher	Schoenherr	cp.schoenherr@smmpa.or g	SMMPA	500 First Ave SW Rochester, MN 55902-3303	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Kay	Schraeder	kschraeder@minnkota.com	Minnkota Power	5301 32nd Ave S Grand Forks, ND 58201	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Dean	Sedgwick	N/A	Itasca Power Company	PO Box 43 Spring Lake, MN 56680	Paper Service	No	OFF_SL_16-222_Official Service List 16-222
Maria	Seidler	maria.seidler@dom.com	Dominion Energy Technology	120 Tredegar Street Richmond, Virginia 23219	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
William	Seuffert	Will.Seuffert@state.mn.us		75 Rev Martin Luther King Jr Blvd 130 State Capitol St. Paul, MN 55155	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
David	Shaffer	shaff081@gmail.com	Minnesota Solar Energy Industries Project	1005 Fairmount Ave Saint Paul, MN 55105	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Patricia	Sharkey	psharkey@environmentalla wcounsel.com	Midwest Cogeneration Association.	180 N. LaSalle Street Suite 3700 Chicago, Illinois 60601	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Patricia F.	Sharkey	N/A	Midwest Cogeneration Association	P.O. Box 87374 Carol Stream, IL 60188	Paper Service	No	OFF_SL_16-222_Official Service List 16-222
Bria	Shea	bria.e.shea@xcelenergy.co m	Xcel Energy	414 Nicollet Mall Minneapolis, MN 55401	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Doug	Shoemaker	dougs@mnRenewables.or g	Minnesota Renewable Energy	2928 5th Ave S Minneapolis, MN 55408	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Mrg	Simon	mrgsimon@mrenergy.com	Missouri River Energy Services	3724 W. Avera Drive P.O. Box 88920 Sioux Falls, SD 571098920	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Anne	Smart	anne.smart@chargepoint.c om	ChargePoint, Inc.	254 E Hacienda Ave Campbell, CA 95008	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Ken	Smith	ken.smith@districtenergy.com	District Energy St. Paul Inc.	76 W Kellogg Blvd St. Paul, MN 55102	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Trevor	Smith	trevor.smith@avantenergy.	Avant Energy, Inc.	220 South Sixth Street Suite 1300 Minneapolis, Minnesota 55402	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Joshua	Smith	joshua.smith@sierraclub.or g		85 Second St FL 2 San Francisco, California 94105	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Ken	Smith	ken.smith@ever- greenenergy.com	Ever Green Energy	1350 Landmark Towers 345 St. Peter St St. Paul, MN 55102	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Beth H.	Soholt	bsoholt@windonthewires.or g	Wind on the Wires	570 Asbury Street Suite 201 St. Paul, MN 55104	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Sky	Stanfield	stanfield@smwlaw.com	Shute, Mihaly & Weinberger	396 Hayes Street San Francisco, CA 94102	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Tom	Stanton	tstanton@nrri.org	NRRI	1080 Carmack Road Columbus, OH 43210	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Byron E.	Starns	byron.starns@stinson.com	Stinson Leonard Street LLP	50 S 6th St Ste 2600 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
James M.	Strommen	jstrommen@kennedy- graven.com	Kennedy & Graven, Chartered	470 U.S. Bank Plaza 200 South Sixth Stree Minneapolis, MN 55402	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Eric	Swanson	eswanson@winthrop.com	Winthrop & Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Thomas P.	Sweeney III	tom.sweeney@easycleane nergy.com	Clean Energy Collective	P O Box 1828 Boulder, CO 80306-1828	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Lynnette	Sweet	Regulatory.records@xcele nergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Steve	Thompson	stevet@cmpasgroup.org	Central Minnesota Municipal Power Agency	459 S Grove St Blue Earth, MN 56013-2629	Paper Service	No	OFF_SL_16-222_Official Service List 16-222
Stuart	Tommerdahl	stommerdahl@otpco.com	Otter Tail Power Company	215 S Cascade St PO Box 496 Fergus Falls, MN 56537	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Pat	Treseler	pat.jcplaw@comcast.net	Paulson Law Office LTD	4445 W 77th Street Suite 224 Edina, MN 55435	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Lise	Trudeau	lise.trudeau@state.mn.us	Department of Commerce	85 7th Place East Suite 500 Saint Paul, MN 55101	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Karen	Turnboom	karen.turnboom@versoco.c om	Verso Corporation	100 Central Avenue Duluth, MN 55807	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Michael	Tyler	michael.tyler@minneapolis mn.gov	City of Mpls Sustainability	350 South 5th St, #315 Minneapolis, MN 55415	Paper Service	No	OFF_SL_16-222_Official Service List 16-222
Lisa	Veith	lisa.veith@ci.stpaul.mn.us	City of St. Paul	400 City Hall and Courthouse 15 West Kellogg Blvd. St. Paul, MN 55102	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Roger	Warehime	warehimer@owatonnautiliti es.com	Owatonna Public Utilities	208 South WalnutPO Box 800 Owatonna, MN 55060	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Jenna	Warmuth	jwarmuth@mnpower.com	Minnesota Power	30 W Superior St Duluth, MN 55802-2093	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Cam	Winton	cwinton@mnchamber.com	Minnesota Chamber of Commerce	400 Robert Street North Suite 1500 St. Paul, Minnesota 55101	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Robyn	Woeste	robynwoeste@alliantenerg y.com	Interstate Power and Light Company	200 First St SE Cedar Rapids, IA 52401	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_16-222_Official Service List 16-222
Thomas J.	Zaremba	TZaremba@wheelerlaw.co m	WHEELER, VAN SICKLE & ANDERSON	44 E. Mifflin Street, 10th Floor Madison, WI 53703	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222
Christopher	Zibart	czibart@atcllc.com	American Transmission Company LLC	W234 N2000 Ridgeview Pkwy Court Waukesha, WI 53188-1022	Electronic Service	No	OFF_SL_16-222_Official Service List 16-222