

March 20, 2018

—Via Electronic Filing—

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

RE: UPDATE

STANDBY SERVICE TARIFFS DOCKET NO. E999/CI-15-115

Dear Mr. Wolf:

Northern States Power Company, doing business as Xcel Energy, submits this letter to update the Commission on the final revisions sought to the terms of Standby Service following further discussions with Flint Hills Resources and other interested parties since the Company's filing dated January 31, 2018. Since that time, the Company, the Department of Commerce, Flint Hills Resources, and the Midwest Cogeneration Association have continued discussions and agreed to final revisions of the Standby Service Rider.

We respectfully request the Commission approve the tariff sheets attached here. These tariff sheets contain modifications that describe the accord achieved with parties and resolve all issues. The sheets contain:

- (1) modifications to the terms of the Standby Service Rider agreed to by the Company, Flint Hills Resources, the Department of Commerce, and the Midwest Cogeneration Association, and
- (2) the terms of the settlement addressing the PV Demand Credit Rider, as discussed in the Company's filings in this proceeding dated November 2, 2017 and unchanged from the Company's January 4, 2018 filing.<sup>1</sup> The

<sup>&</sup>lt;sup>1</sup> This settlement is supported by the Company, the Department of Commerce, and MnSEIA. It is the Company's understanding that Target Corporation is not opposed to this settlement.

Company also provided clarifying language on customer availability in its January 31, 2018 filing.

Parties agree to these certain revisions to Standby Service that would support its use for service to Flint Hills Resources and would replace Flint Hills Resources' prior request for the formation of a separate Large CHP Rider. The Company's agreement to the revisions described below is contingent on parties' ongoing agreement to use the Standby Service Rider as modified.

To assist in clarifying the record on the parties' proposals, we describe the terms agreed to by the parties here.

# The parties agree to modify the terms of Standby Service as follows:

- 1. Clarify language and specify the three types of standby service options in the Availability provision;
- 2. Remove the exempt (grace) hours provision as recommended by the Department with a corresponding reduction in the Peak Period Standby Energy Surcharge per kWh;
- 3. Reduce the share of generation and transmission costs included in the standby reservation demand rate from 12 percent to 7.4 percent of the amount included in base tariff demand rates;
- 4. Clarify that energy used under the Standby Service Rider does not qualify for the base tariff Energy Charge Credit;
- 5. Revise the definition of peak period standby energy for consistency with the removal of the exempt hours provision and to more specifically define its measurement;
- 6. Expand and clarify the Definition of Peak Period for Standby Energy section;
- 7. Add clarity and additional descriptions to the Determination of the Demand provision;
- 8. Retain the option for monthly revisions of contract standby capacity as recommended in the Company's May 15, 2017 Reply Comments;

- 9. Specify in the Standby Service Electric Service Agreement the process and requirements for nominating contracted Standby capacity, including seasonal or monthly levels;
- 10. Remove the definition of excess standby energy usage from the Terms and Conditions of Service (No. 9) as unnecessary without an exempt hours provision;
- 11. Revise the applicable charge for use of unscheduled standby service during system peak hours and where Company provides advance notice to customer of system peak conditions;
- 12. Remove written notice require for scheduled maintenance during the months of April, May, October and November;
- 13. Allow additional scheduled maintenance periods for customers with greater than 1,000 kW of contracted standby capacity subject to advance notice and Company approval;
- 14. Allow scheduled maintenance on weekends and holidays subject to advance Company approval for customer with a time of day base tariff;
- 15. Revise the maximum annual duration of qualified scheduled maintenance periods from six weeks to eight weeks (56 days), as recommended in the Company's May 15, 2017 Reply Comments;
- 16. Revise the 24 hour notice requirement for changes to the annual projection of scheduled maintenance from 48 hours to 72 hours to accommodate holiday weekends; and
- 17. Revise the charge for non-compliance with Scheduled Maintenance Option requirements and limit its applicability to a single month.

The parties agree to establish a PV Demand Credit Rider, as filed on January 4, 2018, as follows:

- 1. The level of the credit in the PV Rider assumes a starting value of \$4.52/kW credit and 11 months as the average non-grace period months in the conversion formula for the kWh based solar credit, resulting in a credit value of 7.139 cents per kWh;
- 2. Current customers under the Standby Service Rider who qualify under the PV Rider at a given location will no longer be on the Standby Service Rider and will be enrolled in the PV Rider. New customers who qualify for the PV Rider at a given location may also enroll in the PV Rider under this rate provided that they do so before the date of an order issued by the Commission authorizing a change to this rate. This subsequently revised rate in an updated PV Demand Credit Rider is referred to as the Revised PV Rider Rate;
- 3. The PV Rider credit rate of 7.139 cents per kWh will be available to customers properly enrolled at the rate as described above for a given location for six years from the date of the Commission order approving the PV Rider. Any customer enrolling in the Revised PV Rider will receive the credit as set forth in the Revised PV Rider Rate tariff;
- 4. Require Xcel Energy, following discussions with the Department of Commerce, MNSEIA and other interested parties, to file a proposed methodology for determining the appropriate solar capacity or demand credit. The methodology should consider reasonable ways to incorporate cost of service principles in demand charges for behind-the-meter solar customer accounts as well as also address the additional issues surrounding the solar capacity or demand credit rider as raised by parties in this docket. Xcel Energy should file its proposal and discussion of the additional issues by September 19, 2018 as well as rationales for why this study is or is not a better indicator of capacity or demand value than previously derived values. Parties will be allowed 60 days to respond;
- 5. Require Xcel Energy, with input from the Department, MNSEIA and other interested parties, to evaluate to what extent the billing demand quantities of customers with solar generation is affected by their solar production. Xcel Energy will review whether there is a mismatch between the net billing demand of individual customers with solar installations and their net demand on system peak demand days relative to non-solar generation customers and, if so, how to reflect that

difference appropriately in demand billing or comparable rate component; and

6. Require Xcel Energy to conduct a new ELCC load study in preparation for its resource planning process. In addition, Xcel will compare this credit to current peak controlled demand credits. All study results will be provided to parties by July 1, 2018;

It is the Company's understanding that the terms identified here would fulfill the intent of Order Point 4 in the Commission's May 19, 2014 Order in Docket No. E002/CI-13-315 and that the Commission could terminate the Company's compliance obligation associated with Order Point 4.

For ease of review, we have included a redline to the Company's current tariff, to the terms of these agreements. The redline and clean tariff sheets are included as Attachment A to this letter.

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 Amber Hedlund at <a href="mailto:amber.r.hedlund@xcelenergy.com">amber.r.hedlund@xcelenergy.com</a> or (612) 337-2268, or me at <a href="mailto:amy.a.liberkowski@xcelenergy.com">amy.a.liberkowski@xcelenergy.com</a> or (612) 330-6613 if you have any questions regarding this filing.

Sincerely,

/s/

AMY A. LIBERKOWSKI
DIRECTOR, REGULATORY PRICING & ANALYSIS

Enclosure c: Service List

Docket No. E999/CI-15-115 Compliance Filing Update Attachment A

# Redline

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

TABLE OF	CONTENTS (C	ontinued)

Section No. 1

16th17th Revised Sheet No. 3

Section	<u>ltem</u>	Sheet No.	
SECTION 5	RATE SCHEDULES (Continued)		
	RIDERS		
	Fuel Clause Rider	5-91	
	Conservation Improvement Program Adjustment Rider	5-92	
	Surcharge Rider	5-93	
	Franchise and Other City Fees	5-93.1	
	Low Income Energy Discount Rider.	5-95	Đ
	Residential Controlled Air Conditioning and Water Heating Rider	5-97	
	Commercial and Industrial Controlled Air Conditioning Rider	5-99	
	Off Season Load Rider	5-100	
	Standby Service Rider	5-101	
	Supplemental Generation Service Rider	5-108	
	Tier 1 Energy Controlled Service Rider	5-115	
	Revenue Decoupling Mechanism Rider	5-117	
	Area Development Rider	5-119	
	Competitive Response Rider	5-122	
	Photovoltaic Demand Credit Rider	<u>5-125</u>	N
	Tier 1 Peak Controlled Short Notice Rider	5-126	_
	City Requested Facilities Surcharge Rider	5-131	
	Voluntary Renewable and High-Efficiency Energy		
	Purchase (Windsource Program) Rider	5-134	
	WAPA Bill Crediting Program Rider	5-135	
	Mercury Cost Recovery Rider	5-136	
	Environmental Improvement Rider	5-137	
	Business Incentive and Sustainability Rider	5-139	
	State Energy Policy Rate Rider	5-142	
	Renewable Development Fund Rider	5-143	
	Transmission Cost Recovery Rider	5-144	
	Renewable Energy Standard Rider	5-146	
	Voluntary Renewable*Connect Rider	5-149	
	Voluntary Renewable*Connect Government Rider	5-154	

# (Continued on Sheet No. 1-4)

Date Filed: 41-02-4505-19-16 By: Christopher B. Clark Effective Date: 40-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/<del>GR-15-826M-13-315 &</del> Order Date: <del>06-12-17</del>

E999/CI-15-115

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# **RATE SCHEDULES TABLE OF CONTENTS (Continued)**

Section No. 5 14th 15th Revised Sheet No. TOC-2

<u>Item</u>	Sheet No.	
RIDER		
245. Fuel Clause Rider	5-91	Ţ
256. Conservation Improvement Program Adjustment Rider	5-92	
2 <mark>67</mark> . Surcharge Rider		
278. Franchise and Other City Fees		
289. Interim Rate Surcharge Rider		
2930. Low Income Energy Discount Rider		
301. Residential Controlled Air Conditioning and Water Heating Rider		
342. Commercial and Industrial Controlled Air Conditioning Rider		
323. Off Season Load Rider		
34. Standby Service Rider		
345. Supplemental Generation Service Rider		
356. Tier 1 Energy Controlled Service Rider		
367. Revenue Decoupling Mechanism Rider		
378. Area Development Rider		
389. Competitive Response Rider		
40. Photovoltaic Demand Credit Rider.		
3941. Tier 1 Peak Controlled Short Notice Rider		T
402. City Requested Facilities Surcharge Rider		
443. Voluntary Renewable and High-Efficiency Energy Purchase (Windsource Program		
424. WAPA Bill Crediting Program Rider		
435. Mercury Cost Recovery Rider		
446. Environmental Improvement Rider		
457. Business Incentive and Sustainability Rider		
468. State Energy Policy Rate Rider		
479. Renewable Development Fund Rider		
4850. Transmission Cost Recovery Rider		
4951. Renewable Energy Standard Rider		
502. Voluntary Renewable*Connect Rider		
512 Voluntary Panawahla*Connect Covernment Pider		Ť

Date Filed: <del>11-02-15</del>05-19-16 By: Christopher B. Clark <del>10-01-17</del> Effective Date:

President, Northern States Power Company, a Minnesota corporation

E002/<del>GR-15-826</del>M-13-315 & 06-12-17 Docket No. Order Date:

E999/CI-15-115

N

#### STANDBY SERVICE RIDER

Section No. 5 17th18th Revised Sheet No. 101

## **AVAILABILITY**

Applicable to customers that use an <u>customer-sited</u> generation source with a capacity greater than 100 kW to, where the alternative generation serves a <u>defined</u> all or a portion of the customer's total electric energy requirements and where customer chooses to use the Company's electric service to serve that <u>defined</u> load when the <u>customer-sited</u> generation is either partly or wholly unavailable. <u>Customer must select</u> one of the following services types: Firm Unscheduled Maintenance, Firm Scheduled Maintenance, or Non-Firm service. This Rider is not available to solar photovoltaic generation systems and is closed to new wind generation systems.

Under this tariff the Company will provide Standby Service in accordance with the provisions of this tariff as well as those of Section 2.4 of the General Rules and Regulations.

RESERVATION RATE			
	<u>Firm</u> :	<u>Standby</u>	Non-Firm
	Unscheduled Maintenance	_ Scheduled Maintenance	<u>Standby</u>
Customer Charge per Month	\$25.64	\$25.64	\$25.64
Reservation Demand Charge per Month per kW of Contracted Standby Capacity			
Secondary Voltage Service	<del>\$3.5</del> 4 <u>\$3.08</u>	<del>\$3.44</del> <u>\$2.98</u>	\$2.35
Primary Voltage Service	<del>\$2.7</del> 4 <u>\$2.28</u>	<del>\$2.64</del> <u>\$2.18</u>	\$1.55
Transmission Transformed Voltage Service	<del>\$1.99</del> \$1.53	<del>\$1.89</del> \$1.43	\$0.80
Transmission Voltage Service	\$1.19 <u>\$0.73</u>	\$1.09 <u>\$0.63</u>	\$0.00
Hours per kW of Contracted Standby Capacity - Annual Grace- Period Use of Unscheduled Standby, Exemption from the	964	<del>96</del> 4	θ
Demand Charge Component of the "Usage Rates" below.			
Peak Period Standby Energy Surcharge per kWh			
June - September		\$0.06545	
Other Months		\$0.04242	

Energy Charge per kWh. All energy used under this Rider will be charged at the applicable energy rate of the base tariff to which this Rider is attached and is not applicable to the base tariff Energy Charge Credit.

#### **STANDBY ENERGY USAGE**

Standby energy usage occurs when the customer-sited generation source output in kW is less than contracted standby kW capacity. Standby energy usage in kWh is measured in 15-minute intervals and is defined as the kWh energy associated with constant operation of customer-sited generation at the contract standby kW capacity level less actual energy production of customer-sited generation, but not less than zero kWh for each 15-minute interval. Actual energy production of customer-sited generation will be measured by Company-owned and installed production metering equipment.

**USAGE RATES** 

(Continued on Sheet No. 5-1021.1)

Date Filed: 41-02-1505-19-16 By: Christopher B. Clark Effective Date: 40-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/<del>GR 15-826M-13-315 & E999/CI-15-115</del> Order Date: <del>06-12-17</del>

CL L R

<u>N</u> D

<u>D</u>

D

D

LC

L

<u>D</u>

D

D

 $\overline{\mathsf{D}}$ 

L

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# STANDBY SERVICE RIDER Section No. 5 17th 18th Revised Sheet No. 101

<u>Demand Charge per kW of Standby Capacity Used.</u> After the Annual Grace Period hours provided for Unscheduled and Scheduled Service are used up, the Demand Charge of the base tariff, to which this Rider is attached, replaces the above Reservation Rate.

<u>Energy Charge per kWh of Standby Energy Used.</u> All energy used under this Rider will be charged at the applicable energy rate of the base tariff to which this Rider is attached.

## **PHOTOVOLTAIC SOLAR CREDIT**

A capacity credit of \$5.15 per month per kW is applicable when the alternative generation source used by the customer is photovoltaic solar. This credit shall only be applied to the applicable Demand Charge of the base tariff for the contracted demand component of the Usage Rates outside of the Grace Period.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

# **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

(Continued on Sheet No. 5-1021.1)

Date Filed: 41-02-1505-19-16 By: Christopher B. Clark Effective Date: 40-01-17

President, Northern States Power Company, a Minnesota corporation

Section No. 5 Original Sheet No. 101.1

## PEAK PERIOD STANDBY ENERGY USAGE

Peak period standby energy usage is the amount of Standby Energy Usage occurring during the peak period that does not occur during a qualifying scheduled maintenance period or is associated with Non-Firm service.

Peak period standby energy usage is subject to the Peak Period Standby Energy Surcharge.

#### **DEFINITION OF PEAK PERIOD**

Peak period hours are the six hours between 1:00 p.m. and 7 p.m. for all days.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

# LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

(Continued on Sheet No. 5-102)

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-315 & E999/CI-15-115 Order Date:

<u>N</u> L

Ν

<u>N</u>

Ν

Ν

Ν

ı

Ī

Į

Section No. 5

13th 14th Revised Sheet No. 102

#### **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

#### **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

#### **LOW INCOME ENERGY DISCOUNT RIDER**

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **LATE PAYMENT CHARGE**

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

# **DETERMINATION OF DEMAND**

The billing demand applicable to this Standby Service Rider is determined separately from the billing demandapplicable to the base tariff to which this Rider attaches. The demand associated with actual use of Standby-Service will be subtracted from the total metered demand, to determine the demand for standard service, towhich the base tariff demand charge applies.

For applying the Standby Service Reservation Rate, the billing demand will be the contracted Standby capacity specified in the customer's Electric Service Agreement, which is the maximum capacity of Standby Service the Company is obligated to supply, and is the amount of load served by the customer's alternative generation. Inno case shall the contracted Standby capacity be established at more than the capacity of the customer's generation facility. This contracted Standby capacity may be different for the summer and winter seasons.

For applying the demand component of the Usage Rates, the billing demand shall be the capacity actually usedby the customer, when customer's generator is wholly or partly out of service. This amount of Standby capacity actually used shall be the contracted Standby capacity less the actual capacity supplied by the customer'sgenerating facilities (assuming it is operating, but not at full capacity), but not less than zero. The billing demand in kW for application to the Standby Service Reservation Demand Charge rate will be the contracted Standby capacity specified in the customer's Electric Service Agreement, which is the maximum capacity of Standby Service the Company is obligated to supply, and is the amount of load expected to be served by the customer-sited generation source. In no case shall the contracted Standby capacity be established at more than the capacity of the customer-sited generation source. Contracted Standby capacity may be different for the summer and winter seasons or by month.

(Continued on Sheet No. 5-103)

Date Filed: <del>11-02-15</del>05-19-16 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/<del>GR-15-826</del><u>M-13-315 & E999/CI-15-115</u> Order Date: 06-12-17

С

Section No. 5 13th14th Revised Sheet No. 102

The metered capacity in kW supplied by Company for Standby Energy Usage by customer will be excluded from the actual demand in kW used to determine any billed demand for the base tariff to which this Rider is attached. This exclusion is determined as the maximum total customer demand, defined as the total of capacity supplied by the customer-sited generation source and the Company measured in 15-minutes intervals, less contracted Standby capacity. All demand measurements will be determined with Company owned and installed meters. The exclusion of capacity supplied by Company for Standby Energy Usage by customer from any base tariff determination of demand calculation is represented by the equation: Base tariff actual demand in kW = Site load (Company supplied capacity in kW measured by the base tariff service meter + Customer supplied capacity in kW measured by production metering of customer-sited generation) – Contracted Standby capacity in kW as determined by the customer nomination in effect for the applicable billing period.

Any billing demand in kW for the base tariff to which this Rider is attached will be calculated using the applicable determination of demand provision defined in the base tariff. For a time of day base tariff, the on-peak and off-peak periods used for billed demand calculations will be based on the definition of peak periods included in the time of day base tariff.

#### TERMS AND CONDITIONS OF SERVICE

1. Standby Service Rider is applicable to any customer who requires greater than 100 kW of Standby capacity. Standby Service may not be used by a customer to serve controllable demand that is subject to interruption as determined by the Company under the Company's controllable service schedules.

(Continued on Sheet No. 5-103)

Date Filed: 41-02-1505-19-16 By: Christopher B. Clark Effective Date: 40-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/<del>GR-15-826</del><u>M-13-315 & E999/CI-15-115</u> Order Date: <del>06-12-17</del>

C

Section No. 5

6th7th Revised Sheet No. 103

# TERMS AND CONDITIONS OF SERVICE (Continued)

- Customer will execute an Electric Service Agreement with the Company which will specify:
  - a. Type of Standby Service elected by the customer and the base tariff to which this Rider is attached.

  - b.c. The process and requirements for nominating contracted Standby capacity, including seasonal or monthly levels.
- The Company's standard service meter will be detented to measure only the amount of capacity and energy provided by the Company to the customer.
- 4. Company will not be obligated to supply Standby Service to back-up a customer's generator at a level in excess of the Standby capacity for which customer has contracted. This restriction in no way limits the amount of standard service the customer requires from the Company under the standard service tariff to which this Rider is attached. Any limits on standard service are governed by the provisions contained in the standard service tariffs.
- Customer will be liable for all damages allowed by law to the extent caused by customer's use of Standby power in excess of contracted Standby capacity.
- Company will require customer to revise the Electric Service Agreement to contract for additional Standby capacity if the customer exceeds the contract amount in any three of the preceding 12 months.
- 7. Customer will annually furnish documentation to Company confirming the maximum capacity and reliability of the power source for which customer requires Standby Service. The Company and the customer will review the actual output and performance of the power source relative to the capacity nominated for Standby Service in the Electric Service Agreement. If this review shows a significant and consistent shortfall between the power source's actual performance and the nominated capacity due to factors reasonably within the customer's control, the Company will notify the customer of its intent to refuse to provide Standby Service. Upon receipt of such notice, the customer may agree to reduce the Standby Service nomination in its Electric Service Agreement or to take such action as necessary to operate the power source at or reasonably near the nominated Standby Service capacity. If the customer's power source does not operate at or reasonably near that level during the 12 months immediately following the Company's notice, the Company may refuse to provide Standby Service until such time as the customer agrees to reduce its Standby Service nomination or provide the Company with documentation demonstrating the power source's actual performance at or reasonably near the nominated Standby Service capacity for a trial period of three consecutive months.
- 8. Customer will remain on Standby Service for a period of not less than 12 months.

(Continued on Sheet No. 5-104)

Date Filed: 41-02-1505-19-16 By: Christopher B. Clark Effective Date: 40-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/<del>GR-15-826</del><u>M-13-315 & E999/CI-15-115</u> Order Date: <del>06-12-17</del>

Т

<u>N</u>

Section No. 5

7th8th Revised Sheet No. 104

#### TERMS AND CONDITIONS OF SERVICE (Continued)

9. Customer will be allowed annually a Grace Period as specified above for use of unscheduled Standby-Service without incurring additional demand charges for use of Standby Service. Use of this Grace Period-will be measured in terms of Standby energy used by customer with the maximum amount of grace energy being the hours specified above times the contracted Standby capacity. After the Grace Period has been exhausted and customer uses unscheduled Standby Service, the customer shall pay the Demand Charge-specified in the Usage Rates instead of the Reservation Fees as listed above. In a billing month, when customer uses Standby Service, the base tariff billing demand and the Standby Service billing demand will be determined individually. The base tariff billing demand will be the greatest 15 minute load determined after separating Standby Service usage from the total metered demands. The time of this determined greatest 15 minute demand for application to the base tariff may or may not occur at the same time when Standby Service is used. Billed demand charges for usage of Standby Service will be in addition to the billed demand charges for the base tariff as just described.

Customers contracting for Standby Service to back up a solar photovoltaic system have the option to-move their annual start date and subsequent Grace-Periods forward to June 1. However, a customer shall not receive two annual Grace-Periods for the same solar photovoltaic system in any rolling 12-month-billing period.

- 10. Notwithstanding the Grace Period noted in provision 9 above, in the event customer requires unscheduled Standby Service at the times of Company's system peak hours in which the Company would have insufficient accredited capacity under the Midwest Reliability Organization (MRO) or any successor organization, and the Company incurs additional capacity costs as a result of such unscheduled Standby Service, customer shall pay Peak Demand Charges described below for the month in which such unscheduled Standby Service occurs and for each of the five succeeding months, instead of the above listed demand charges, or the demand charges under Section 9 above. Such Peak Demand Charges shall be based upon the following:
- a. If customer has notified Company of an unscheduled outage at least three hours prior to Company's system peak hour, such Peak Demand Charges shall be based on one-sixth of any additional capacity costs incurred by the Company as a result of the unscheduled outage. Such additional capacity costs shall not include any after-the-fact capacity purchase costs incurred by the Company.
- b. If customer has not notified the Company of any unscheduled outage at least three hours prior to the Company's system peak hour, such peak demand charges shall be based on one-sixth of any additional capacity costs or after-the-fact purchase costs incurred by the Company as a result of the unscheduled outage. The demand for billing purposes for the succeeding five months shall be equal to the demand-placed on the system during the time of the Company's system peak hour in which the said additional capacity costs were incurred.
- In the event Company provides advance notice to customer of expected system peak load conditions for a specified time period and customer uses unscheduled standby backup demand during that time period, the

(Continued on Sheet No. 5-105)

Date Filed: 41-02-1505-19-16 By: Christopher B. Clark Effective Date: 40-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/<del>GR-15-826</del>M-13-315 & E999/CI-15-115 Order Date: <del>06-12-17</del>

<u>D</u>

<u>D</u> <u>N</u> <u>N</u>

10-01-17

#### STANDBY SERVICE RIDER (Continued)

Section No. 5

7th8th Revised Sheet No. 104

backup demand quantity used will be billed at the firm service demand charge from the base tariff to which this Rider is attached instead of the Reservation Demand charge. The quantity of unscheduled standby backup demand used for this provision will be the maximum 15-minute measured interval of unscheduled standby backup demand used during the specified system peak hours, measured as contracted standby capacity less the capacity provided by the customer-sited generation source. Company notice of expected system peak load conditions for this provision will be provided through the same means Company uses to notify interruptible customers of an interruption requirement.

43.10. Company will install and charge customer for the additional metering necessary, to allow for determining Peak Period Standby Energy usage. In particular, the Company will install a separate meter that measures the flow of power and energy from the customer's own generating facility. Customer shall reimburse the Company for the costs of installing, operating, and maintaining the required additional metering and for any other facilities required to serve the customer's Standby load. If, as a result of the customer's construction and installation of their generating facility, it is more practical for the customer to install some or all of the metering equipment required, the customer may be permitted to do so, subject to Company's approval of such equipment.

Date Filed: 41-02-1505-19-16 By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/<del>GR-15-826</del>M-13-315 & E999/CI-15-115 Order Date: 06-12-17

D

Section No. 5

7th8th Revised Sheet No. 105

## **TERMS AND CONDITIONS OF SERVICE (Continued)**

The provisions of this Section 10 shall not apply if appropriate capacity accreditation has been obtained for the customer's generation from the Midwest Reliability Organization (MRO), or any successor organization. Customer must take responsibility for the preparation of the information necessary for the accreditation filing. The Company will advise and assist the Customer in this process but failure of customer in the preparation of the information and/or failure to obtain accreditation of the customer's generation will result in the customer being ineligible for the exemption from the provisions of this Section 10.

- 11. In the event any portion of the capacity obtained by the Company, at additional costs, and which is attributable to the customer's use of Standby Service under Section 10 above, is subsequently also used to satisfy the requirements of the Company's other customers, the Peak Demand Charges under Section 10 above shall be reduced relative to the portion of said capacity used to serve other customers.
- 12. The Company shall provide notice to the Standby customers when peak load conditions are expected to occur through the same means that the Company notifies interruptible customers of the potential interruption.
- 43. Company will install and charge customer for the additional metering necessary, to allow for determination of the separate billing demand applicable to the base tariff and Standby Rider and for determining energy use under the Grace Period identified above. In particular, the Company will install a separate meter that measures the flow of power and energy from the customer's own generating facility. Customer shall reimburse the Company for the costs of installing, operating, and maintaining the required additional metering and for any other facilities required to serve the customer's Standby load. If, as a result of the customer's construction and installation of their generating facility, it is more practical for the customer to install some or all of the metering equipment required, the customer may be permitted to do so, subject to Company's approval of such equipment.

# ADDITIONAL TERMS AND CONDITIONS OF SERVICE ASSOCIATED WITH THE SCHEDULED MAINTENANCE OPTION

- 1. The optional Scheduled Maintenance rates are available to Standby Service customers who agree to schedule maintenance of their power source during qualifying scheduled maintenance periods.
- 2. Qualifying Scheduled Maintenance Periods

Maintenance may occur within the calendar months of April, May, October, and November without written customer notice to Company prior to the beginning of the maintenance period regardless of the size of the contracted Standby capacity.

#### (Continued on Sheet No. 5-106)

Date Filed: 11-02-1505-19-16 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/<del>GR-15-826</del> M-13-315 & Order Date: <del>06-12-17</del>

E999/CI-15-115

# <u>N</u>

| <u>N</u> <u>D</u> <u>L</u> | |

# STANDBY SERVICE RIDER (Continued)

Section No. 5

7th8th Revised Sheet No. 105

In other months for customers with a base time of day tariff to which this Rider is attached, regardless of the size of the contracted Standby capacity, scheduled maintenance may occur, with Company approval, during weekends and holidays as identified in the time of day base tariff, where a documented customer request is provided no less than 48 hours prior to the beginning of the planned maintenance period.

Company will endeavor to approve or deny the customer request within 24 hours of receiving the request.

For months other than April, May, October, and November, customers with a minimum contracted Standby capacity of 1,000 kW may schedule maintenance at a time period mutually agreed to by Company and customer, following a documented customer request. These time periods for scheduled maintenance will normally not include those times when Company expects high system seasonal peak load conditions or high energy production costs.

Customer shall provide an annual projection of scheduled maintenance to the Company. Customer shall be allowed changes or additions to this projection upon notice to the Company based on the following schedule:

Outage LengthRequired NoticeLess than 72 hours24 hours3 days to 30 days7 daysOver 30 days90 days

3. The duration of qualifying scheduled maintenance periods may not exceed a total of 56 days in any 12 month period.

(Continued on Sheet No. 5-106)

Date Filed: 11-02-1505-19-16 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/<del>GR-15-826</del> M-13-315 & Order Date: <del>06-12-17</del>

E999/CI-15-115

Section No.

7th8th Revised Sheet No. 106

# ADDITIONAL TERMS AND CONDITIONS OF SERVICE ASSOCIATED WITH THE SCHEDULED MAINTENANCE OPTION (Continued)

- 1. The optional Scheduled Maintenance rates are available to Standby Service customers who agree toschedule maintenance of their power source during qualifying scheduled maintenance periods.
- 2. Qualifying Scheduled Maintenance Periods

<u>Customers With Greater Than 100 kW to 10,000 kW of Contracted Standby Capacity.</u> Maintenance must occur within the calendar months of April, May, October, and November. Customer must provide Company with written notice of scheduled maintenance prior to the beginning of the maintenance period.

Customers With Greater Than 10,000 kW of Contracted Standby Capacity. Maintenance must occur at a time period mutually agreed to by Company and customer. These time periods will normally not include those times when Company expects system seasonal peak load conditions to occur, nor at those times when Company is required to use generation or to purchase power, with production costs of \$70 or more per MWh. Customer shall provide an annual projection of scheduled maintenance to the Company. Customer shall be allowed changes or additions to this projection upon notice to the Company based on the following schedule:

Outage LengthRequired NoticeLess than 48 hours24 hours2 days to 30 days7 daysOver 30 days90 days

- The duration of qualifying scheduled maintenance periods may not exceed a total of six weeks in any 12
  month period.
- 4. An additional charge shall apply ilf customer does not comply with all terms and conditions for qualifying scheduled maintenance periods during any billing month, all use of Standby Service for the same month will be subject to the Peak Period Standby Energy charge provision. Company may determine partial non-compliance and limit the quantity of Standby Service usage subject to the Peak Period Standby Energy charge provision. Company reserves the right to remove availability of the Scheduled Maintenance Option for any customer upon a determination of significant and multiple occurrences of failure to comply with all associated terms and conditions. The additional charge shall be determined by calculating the additional charges which would have applied if customer were billed on the Unscheduled Maintenance Option for the period extending back to the customer's last scheduled maintenance period.
- 5. The demand charges of the base tariffs shall not apply to use of Standby Service during qualifying scheduled maintenance periods. Also, use of Standby Service during qualifying scheduled maintenance periodss, will not count against the grace periodbe included in the determination of Peak Period Standby Energy usage.

(Continued on Sheet No. 5-107)

Date Filed: 41-02-1505-19-16 By: Christopher B. Clark Effective Date: 40-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/<del>GR-15-826</del><u>M-13-315 & E999/CI-15-115</u> Order Date: <del>06-12-17</del>

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

COMPETITIVE MARKET RIDER
(Continued)PHOTOVOLTAIC DEMAND CREDIT RIDER
RATE CODE A85 (CLOSED)

Section No. 5

3rd4th Revised Sheet No. 125

**RATE CODE A86** 

#### **CANCELLED AVAILABILITY - GENERAL**

Applicable by customer request to demand-metered commercial and industrial customers that use Solar Photovoltaic as a customer-sited generation source with a capacity greater than 40 kW (AC) with a single production meter to serve all or a portion of customer's electric energy requirements. Not available to customer-sited generation that is the subject of another incentive program such as Solar\*Rewards.

# **AVAILABILITY - CLOSED RATE**

Availability of the closed rate is limited to qualifying customer account locations that: 1) are receiving Standby Service Rider tariff service with the Photovoltaic Solar Credit on the date this Rider is originally approved by the Commission, or 2) have enrolled for the Rider before the date the credit rate in this Rider is revised by the Commission. The closed rate will remain fixed for a six year period beginning with the original Commission order date approving this Rider, expiring \_\_\_\_\_\_, 2024. After expiration of the closed rate, the applicable standard rate will replace the closed rate.

The standard rate will apply to customer account locations that do not qualify for the closed rate. The standard rate may be revised at any time subject to approval by the Commission.

#### RATE

Customer Charge per Month \$25.75

Credit per kWh of Peak Period Solar Photovoltaic Generation (A85 - Closed)	<b>\$</b> 0.07139
Credit per kWh of Peak Period Solar Photovoltaic Generation (A86 - Standard)	\$0.07139

## **CREDIT KWH LIMIT**

The maximum kWh applied to the Rider credit per kWh each billing period is the Peak Period maximum 15-minute Solar Photovoltaic kW output for the billing period times 100 hours for billing periods ending in the months of June, July, August or September and 75 hours for billing periods ending in other months.

# **CREDIT LIMIT**

The maximum credit for each billing period is the applicable standard or on-peak billed demand charge from the base tariff associated with this Rider. For Peak-Controlled Service and Peak-Controlled Time of Day Service customers, the maximum credit for each billing period is the billed demand charge for Firm Demand.

## **DEFINITION OF PEAK PERIOD**

Peak period hours are the six hours between 1:00 p.m. and 7 p.m. for all days.

#### TERMS AND CONDITIONS OF SERVICE

- 1. Customer will execute an Electric Service Agreement with the Company that will specify:
  - a) The base tariff associated with this Rider, and
  - b) The installed capacity (AC) of customer's Solar Photovoltaic generation.
- 2. Company will install, own, and maintain the metering to measure the electric power and energy supplied by customer generation to allow for proper billing of the customer under this Rider. If, as a result of the customer's construction and installation of their generating facility, it is more practical for the customer to install some or all of the metering equipment required, the customer may be permitted to do so, subject to Company's approval of such equipment.

Date Filed: 41-02-1205-19-16 By: David M. Sparby Christopher B. Clark Effective Date: 12-01-13

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

Docket No. E002/<del>GR-12-961</del>M-13-315 & Order Date: <del>09-03-13</del>

E999/CI-15-115

<del>D</del> Ŧ<u>DN</u>

IN

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

**PROPOSED** 

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

COMPETITIVE MARKET RIDER
(Continued)PHOTOVOLTAIC DEMAND CREDIT RIDER
RATE CODE A85 (CLOSED)

**RATE CODE A86** 

Section No. 5

3rd4th Revised Sheet No. 125

- 3. Company reserves the right to limit availability of this Rider to customer situations where the Solar Photovoltaic generation used by customer does not significantly affect the monthly peak demand of customer.
- 4. For Solar Photovoltaic generation, this Rider supersedes other Standby Service tariff provisions.

<u>N</u>

<u>N</u>

Date Filed: 41-02-1205-19-16 By: David M. SparbyChristopher B. Clark Effective Date: 42-01-13

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

Docket No. E002/<del>GR 12 961M-13-315 &</del> Order Date: <del>09-03-13</del>

E999/CI-15-115

Docket No. E999/CI-15-115 Compliance Filing Update Attachment A

# Clean

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

TARIF	OF CC	NTFNTS	(Continued)	

Section No. 1

17th Revised Sheet No. 3

Section	<u>ltem</u>	Sheet No.
SECTION 5	RATE SCHEDULES (Continued)	
	RIDERS	
	Fuel Clause Rider	5-91
	Conservation Improvement Program Adjustment Rider	5-92
	Surcharge Rider	
	Franchise and Other City Fees	5-93.1
	Low Income Energy Discount Rider	5-95
	Residential Controlled Air Conditioning and Water Heating Rider	5-97
	Commercial and Industrial Controlled Air Conditioning Rider	5-99
	Off Season Load Rider	5-100
	Standby Service Rider	5-101
	Supplemental Generation Service Rider	5-108
	Tier 1 Energy Controlled Service Rider	5-115
	Revenue Decoupling Mechanism Rider	5-117
	Area Development Rider	5-119
	Competitive Response Rider	5-122
	Photovoltaic Demand Credit Rider	5-125
	Tier 1 Peak Controlled Short Notice Rider	5-126
	City Requested Facilities Surcharge Rider	5-131
	Voluntary Renewable and High-Efficiency Energy	
	Purchase (Windsource Program) Rider	5-134
	WAPA Bill Crediting Program Rider	5-135
	Mercury Cost Recovery Rider	5-136
	Environmental Improvement Rider	5-137
	Business Incentive and Sustainability Rider	
	State Energy Policy Rate Rider	5-142
	Renewable Development Fund Rider	5-143
	Transmission Cost Recovery Rider	5-144
	Renewable Energy Standard Rider	5-146
	Voluntary Renewable*Connect Rider	5-149
	Voluntary Renewable*Connect Government Rider	5-154

# (Continued on Sheet No. 1-4)

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-315 & Order Date:

E999/CI-15-115

Ν

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# RATE SCHEDULES TABLE OF CONTENTS (Continued)

Section No. 5 15th Revised Sheet No. TOC-2

<u>lte</u>	<u>Shee</u>	et No.	
RID	DER.		_
25.	Fuel Clause Rider	. 5-91	T
26.	Conservation Improvement Program Adjustment Rider	. 5-92	
27.	Surcharge Rider	. 5-93	
28.	Franchise and Other City Fees	. 5-93.1	
29.	Interim Rate Surcharge Rider	. 5-94	
30.	Low Income Energy Discount Rider	. 5-95	
31.	Residential Controlled Air Conditioning and Water Heating Rider	. 5-97	
32.	Commercial and Industrial Controlled Air Conditioning Rider	. 5-99	
33.	Off Season Load Rider	. 5-100	
34.	Standby Service Rider	. 5-101	
35.	Supplemental Generation Service Rider	. 5-108	
36.	Tier 1 Energy Controlled Service Rider	. 5-115	
37.	Revenue Decoupling Mechanism Rider	. 5-117	
38.	Area Development Rider	. 5-119	
39.	Competitive Response Rider	. 5-122	
	Photovoltaic Demand Credit Rider		N
41.	Tier 1 Peak Controlled Short Notice Rider	. 5-126	
42.	City Requested Facilities Surcharge Rider	. 5-131	
43.	Voluntary Renewable and High-Efficiency Energy Purchase (Windsource Program) Rider	. 5-134	
44.	WAPA Bill Crediting Program Rider	. 5-135	
45.	Mercury Cost Recovery Rider	. 5-136	
46.	Environmental Improvement Rider	. 5-137	
47.	Business Incentive and Sustainability Rider	. 5-139	
48.	State Energy Policy Rate Rider	. 5-142	
49.	Renewable Development Fund Rider	. 5-143	
50.	Transmission Cost Recovery Rider	. 5-144	
51.	Renewable Energy Standard Rider	. 5-146	
52.	Voluntary Renewable*Connect Rider	. 5-149	
53.	Voluntary Renewable*Connect Government Rider	. 5-154	Т

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-315 & E999/CI-15-115 Order Date:

# STANDBY SERVICE RIDER

Section No. 5 18th Revised Sheet No. 101

## **AVAILABILITY**

Applicable to customers that use a customer-sited generation source with a capacity greater than 100 kW to serve a defined portion of the customer's total electric energy requirements and where customer chooses to use the Company's electric service to serve that defined load when the customer-sited generation is either partly or wholly unavailable. Customer must select one of the following services types: Firm Unscheduled Maintenance, Firm Scheduled Maintenance, or Non-Firm service. This Rider is not available to solar photovoltaic generation systems and is closed to new wind generation systems.

Under this tariff the Company will provide Standby Service in accordance with the provisions of this tariff as well as those of Section 2.4 of the General Rules and Regulations.

RATE

TOTAL CONTRACTOR OF THE PROPERTY OF THE PROPER	Firm S	Non-Firm	
	Unscheduled Maintenance	Scheduled <u>Maintenance</u>	<u>Standby</u>
Customer Charge per Month	\$25.64	\$25.64	\$25.64
Reservation Demand Charge per Month per kW of Contracted Standby Capacity			
Secondary Voltage Service	\$3.08	\$2.98	\$2.35
Primary Voltage Service	\$2.28	\$2.18	\$1.55
Transmission Transformed Voltage Service	\$1.53	\$1.43	\$0.80
Transmission Voltage Service	\$0.73	\$0.63	\$0.00
Peak Period Standby Energy Surcharge per kWh			
June – September		\$0.06545	
Other Months		\$0.04242	

<u>Energy Charge per kWh.</u> All energy used under this Rider will be charged at the applicable energy rate of the base tariff to which this Rider is attached and is not applicable to the base tariff Energy Charge Credit.

# STANDBY ENERGY USAGE

Standby energy usage occurs when the customer-sited generation source output in kW is less than contracted standby kW capacity. Standby energy usage in kWh is measured in 15-minute intervals and is defined as the kWh energy associated with constant operation of customer-sited generation at the contract standby kW capacity level less actual energy production of customer-sited generation, but not less than zero kWh for each 15-minute interval. Actual energy production of customer-sited generation will be measured by Company-owned and installed production metering equipment.

(Continued on Sheet No. 5-101.1)

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-315 & E999/CI-15-115 Order Date:

00000

С

CL

R R R R D N

> LC LN

Ν

D L

Ν

N

Ν

Ν

N

Ν

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## **STANDBY SERVICE RIDER (Continued)**

Section No. 5 Original Sheet No. 101.1

#### PEAK PERIOD STANDBY ENERGY USAGE

Peak period standby energy usage is the amount of Standby Energy Usage occurring during the peak period that does not occur during a qualifying scheduled maintenance period or is associated with Non-Firm service. Peak period standby energy usage is subject to the Peak Period Standby Energy Surcharge.

#### **DEFINITION OF PEAK PERIOD**

Peak period hours are the six hours between 1:00 p.m. and 7 p.m. for all days.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

# LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

(Continued on Sheet No. 5-102)

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-315 & E999/CI-15-115 Order Date:

Section No. 5 14th Revised Sheet No. 102

#### **DETERMINATION OF DEMAND**

The billing demand in kW for application to the Standby Service Reservation Demand Charge rate will be the contracted Standby capacity specified in the customer's Electric Service Agreement, which is the maximum capacity of Standby Service the Company is obligated to supply, and is the amount of load expected to be served by the customer-sited generation source. In no case shall the contracted Standby capacity be established at more than the capacity of the customer-sited generation source. Contracted Standby capacity may be different for the summer and winter seasons or by month.

The metered capacity in kW supplied by Company for Standby Energy Usage by customer will be excluded from the actual demand in kW used to determine any billed demand for the base tariff to which this Rider is attached. This exclusion is determined as the maximum total customer demand, defined as the total of capacity supplied by the customer-sited generation source and the Company measured in 15-minutes intervals, less contracted Standby capacity. All demand measurements will be determined with Company owned and installed meters. The exclusion of capacity supplied by Company for Standby Energy Usage by customer from any base tariff determination of demand calculation is represented by the equation: Base tariff actual demand in kW = Site load (Company supplied capacity in kW measured by the base tariff service meter + Customer supplied capacity in kW measured by production metering of customer-sited generation) – Contracted Standby capacity in kW as determined by the customer nomination in effect for the applicable billing period.

Any billing demand in kW for the base tariff to which this Rider is attached will be calculated using the applicable determination of demand provision defined in the base tariff. For a time of day base tariff, the on-peak and off-peak periods used for billed demand calculations will be based on the definition of peak periods included in the time of day base tariff.

# TERMS AND CONDITIONS OF SERVICE

1. Standby Service Rider is applicable to any customer who requires greater than 100 kW of Standby capacity. Standby Service may not be used by a customer to serve controllable demand that is subject to interruption as determined by the Company under the Company's controllable service schedules.

(Continued on Sheet No. 5-103)

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-315 & E999/CI-15-115 Order Date:

L

С

Ċ

Section No. 5 7th Revised Sheet No. 103

#### **TERMS AND CONDITIONS OF SERVICE (Continued)**

- 2. Customer will execute an Electric Service Agreement with the Company which will specify:
  - a. Type of Standby Service elected by the customer and the base tariff to which this Rider is attached.
  - b. The total Standby capacity requirements for which Company will be providing Standby power and to which the Standby Service reservation rate applies as well as the expected level of standard service the customer will take, even if the standard service level is expected to be zero.
  - c. The process and requirements for nominating contracted Standby capacity, including seasonal or monthly levels.
- The Company's standard service meter will be detented to measure only the amount of capacity and energy provided by the Company to the customer.
- 4. Company will not be obligated to supply Standby Service to back-up a customer's generator at a level in excess of the Standby capacity for which customer has contracted. This restriction in no way limits the amount of standard service the customer requires from the Company under the standard service tariff to which this Rider is attached. Any limits on standard service are governed by the provisions contained in the standard service tariffs.
- Customer will be liable for all damages allowed by law to the extent caused by customer's use of Standby power in excess of contracted Standby capacity.
- Company will require customer to revise the Electric Service Agreement to contract for additional Standby capacity if the customer exceeds the contract amount in any three of the preceding 12 months.
- 7. Customer will annually furnish documentation to Company confirming the maximum capacity and reliability of the power source for which customer requires Standby Service. The Company and the customer will review the actual output and performance of the power source relative to the capacity nominated for Standby Service in the Electric Service Agreement. If this review shows a significant and consistent shortfall between the power source's actual performance and the nominated capacity due to factors reasonably within the customer's control, the Company will notify the customer of its intent to refuse to provide Standby Service. Upon receipt of such notice, the customer may agree to reduce the Standby Service nomination in its Electric Service Agreement or to take such action as necessary to operate the power source at or reasonably near the nominated Standby Service capacity. If the customer's power source does not operate at or reasonably near that level during the 12 months immediately following the Company's notice, the Company may refuse to provide Standby Service until such time as the customer agrees to reduce its Standby Service nomination or provide the Company with documentation demonstrating the power source's actual performance at or reasonably near the nominated Standby Service capacity for a trial period of three consecutive months.
- 8. Customer will remain on Standby Service for a period of not less than 12 months.

(Continued on Sheet No. 5-104)

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-315 & E999/CI-15-115 Order Date:

Т

N N

Section No. 5 8th Revised Sheet No. 104

#### **TERMS AND CONDITIONS OF SERVICE (Continued)**

- 9. In the event Company provides advance notice to customer of expected system peak load conditions for a specified time period and customer uses unscheduled standby backup demand during that time period, the backup demand quantity used will be billed at the firm service demand charge from the base tariff to which this Rider is attached instead of the Reservation Demand charge. The quantity of unscheduled standby backup demand used for this provision will be the maximum 15-minute measured interval of unscheduled standby backup demand used during the specified system peak hours, measured as contracted standby capacity less the capacity provided by the customer-sited generation source. Company notice of expected system peak load conditions for this provision will be provided through the same means Company uses to notify interruptible customers of an interruption requirement.
- 10. Company will install and charge customer for the additional metering necessary, to allow for determining Peak Period Standby Energy usage. In particular, the Company will install a separate meter that measures the flow of power and energy from the customer's own generating facility. Customer shall reimburse the Company for the costs of installing, operating, and maintaining the required additional metering and for any other facilities required to serve the customer's Standby load. If, as a result of the customer's construction and installation of their generating facility, it is more practical for the customer to install some or all of the metering equipment required, the customer may be permitted to do so, subject to Company's approval of such equipment.

(Continued on Sheet No. 5-105)

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-315 & E999/CI-15-115 Order Date:

Ν

Ν

N

Ν

# D L

C C

N D

> C C

# STANDBY SERVICE RIDER (Continued)

Section No. 5 8th Revised Sheet No. 105

# ADDITIONAL TERMS AND CONDITIONS OF SERVICE ASSOCIATED WITH THE SCHEDULED MAINTENANCE OPTION

- 1. The optional Scheduled Maintenance rates are available to Standby Service customers who agree to schedule maintenance of their power source during qualifying scheduled maintenance periods.
- 2. Qualifying Scheduled Maintenance Periods

Maintenance may occur within the calendar months of April, May, October, and November without written customer notice to Company prior to the beginning of the maintenance period regardless of the size of the contracted Standby capacity.

In other months for customers with a base time of day tariff to which this Rider is attached, regardless of the size of the contracted Standby capacity, scheduled maintenance may occur, with Company approval, during weekends and holidays as identified in the time of day base tariff, where a documented customer request is provided no less than 48 hours prior to the beginning of the planned maintenance period. Company will endeavor to approve or deny the customer request within 24 hours of receiving the request.

For months other than April, May, October, and November, customers with a minimum contracted Standby capacity of 1,000 kW may schedule maintenance at a time period mutually agreed to by Company and customer, following a documented customer request. These time periods for scheduled maintenance will normally not include those times when Company expects high system seasonal peak load conditions or high energy production costs.

Customer shall provide an annual projection of scheduled maintenance to the Company. Customer shall be allowed changes or additions to this projection upon notice to the Company based on the following schedule:

Outage LengthRequired NoticeLess than 72 hours24 hours3 days to 30 days7 daysOver 30 days90 days

The duration of qualifying scheduled maintenance periods may not exceed a total of 56 days in any 12 month period.

# (Continued on Sheet No. 5-106)

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/ M-13-315 & Order Date:

E999/CI-15-115

Section No. 8th Revised Sheet No. 106

# ADDITIONAL TERMS AND CONDITIONS OF SERVICE ASSOCIATED WITH THE SCHEDULED **MAINTENANCE OPTION (Continued)**

- If customer does not comply with all terms and conditions for qualifying scheduled maintenance periods during any billing month, all use of Standby Service for the same month will be subject to the Peak Period Standby Energy charge provision. Company may determine partial non-compliance and limit the quantity of Standby Service usage subject to the Peak Period Standby Energy charge provision. Company reserves the right to remove availability of the Scheduled Maintenance Option for any customer upon a determination of significant and multiple occurrences of failure to comply with all associated terms and conditions.
- The use of Standby Service during qualifying scheduled maintenance periods will not be included in the determination of Peak Period Standby Energy usage.

Date Filed: 05-19-16

Docket No.

By: Christopher B. Clark

Effective Date:

President, Northern States Power Company, a Minnesota corporation E002/M-13-315 & E999/CI-15-115

Order Date:

С

С

(Continued on Sheet No. 5-107)

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PHOTOVOLTAIC DEMAND CREDIT RIDER RATE CODE A85 (CLOSED) RATE CODE A86 Section No. 5 4th Revised Sheet No. 125

#### **AVAILABILITY - GENERAL**

Applicable by customer request to demand-metered commercial and industrial customers that use Solar Photovoltaic as a customer-sited generation source with a capacity greater than 40 kW (AC) with a single production meter to serve all or a portion of customer's electric energy requirements. Not available to customer-sited generation that is the subject of another incentive program such as Solar\*Rewards.

# **AVAILABILITY - CLOSED RATE**

Availability of the closed rate is limited to qualifying customer account locations that: 1) are receiving Standby Service Rider tariff service with the Photovoltaic Solar Credit on the date this Rider is originally approved by the Commission, or 2) have enrolled for the Rider before the date the credit rate in this Rider is revised by the Commission. The closed rate will remain fixed for a six year period beginning with the original Commission order date approving this Rider, expiring \_\_\_\_ \_\_, 2024. After expiration of the closed rate, the applicable standard rate will replace the closed rate.

The standard rate will apply to customer account locations that do not qualify for the closed rate. The standard rate may be revised at any time subject to approval by the Commission.

#### **RATE**

Customer Charge per Month \$25.75

Credit per kWh of Peak Period Solar Photovoltaic Generation (A85 - Closed) \$0.07139 Credit per kWh of Peak Period Solar Photovoltaic Generation (A86 - Standard) \$0.07139

#### **CREDIT KWH LIMIT**

The maximum kWh applied to the Rider credit per kWh each billing period is the Peak Period maximum 15-minute Solar Photovoltaic kW output for the billing period times 100 hours for billing periods ending in the months of June, July, August or September and 75 hours for billing periods ending in other months.

## **CREDIT LIMIT**

The maximum credit for each billing period is the applicable standard or on-peak billed demand charge from the base tariff associated with this Rider. For Peak-Controlled Service and Peak-Controlled Time of Day Service customers, the maximum credit for each billing period is the billed demand charge for Firm Demand.

#### **DEFINITION OF PEAK PERIOD**

Peak period hours are the six hours between 1:00 p.m. and 7 p.m. for all days.

# TERMS AND CONDITIONS OF SERVICE

- 1. Customer will execute an Electric Service Agreement with the Company that will specify:
  - a) The base tariff associated with this Rider, and
  - b) The installed capacity (AC) of customer's Solar Photovoltaic generation.
- 2. Company will install, own, and maintain the metering to measure the electric power and energy supplied by customer generation to allow for proper billing of the customer under this Rider. If, as a result of the customer's construction and installation of their generating facility, it is more practical for the customer to install some or all of the metering equipment required, the customer may be permitted to do so, subject to Company's approval of such equipment.
- 3. Company reserves the right to limit availability of this Rider to customer situations where the Solar Photovoltaic generation used by customer does not significantly affect the monthly peak demand of customer.
- 4. For Solar Photovoltaic generation, this Rider supersedes other Standby Service tariff provisions.

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-315 & E999/CI-15-115 Order Date:

D N

Ν

# **CERTIFICATE OF SERVICE**

I, Lynnette 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
- xx electronic filing

Docket No. E999/CI-15-115

Dated this 20th day of March 2018

/s/

Lynnette 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_15-115_Official
Christopher	Anderson	canderson@allete.com	Minnesota Power	30 W Superior St  Duluth, MN 558022191	Electronic Service	No	OFF_SL_15-115_Official
Mara	Ascheman	mara.k.ascheman@xcelen ergy.com	Xcel Energy	414 Nicollet Mall FI 5  Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-115_Official
John	Aune	johna@bluehorizonsolar.co m	Blue Horizon Energy	171 Cheshire Ln Ste 500  Plymouth, MN 55441	Electronic Service	No	OFF_SL_15-115_Official
Kenneth	Baker	Ken.Baker@walmart.com	Wal-Mart Stores, Inc.	2001 SE 10th St.  Bentonville, AR 72716-5530	Electronic Service	No	OFF_SL_15-115_Official
Wissam	Balshe	wissam.balshe@cummins.com		N/A	Electronic Service	No	OFF_SL_15-115_Official
Gail	Baranko	gail.baranko@xcelenergy.c om	Xcel Energy	414 Nicollet Mall7th Floor  Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-115_Official
Sara	Bergan	sebergan@stoel.com	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-115_Official
James 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_15-115_Official
Amanda	Bilek	abilek@gpisd.net	Great Plains Institute	2801 21st Ave S Ste 220  Minneapolis, MN 55407-1229	Electronic Service	No	OFF_SL_15-115_Official
Thor	Bjork	Thor.S.Bjork@xcelenergy.c om	Xcel Energy	414 Nicollet Mall  Minneapolis,  MN  55401	Electronic Service	No	OFF_SL_15-115_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
William	Black	bblack@mmua.org	MMUA	Suite 400 3025 Harbor Lane No Plymouth, MN 554475142	Electronic Service tth	No	OFF_SL_15-115_Official
William A.	Blazar	bblazar@mnchamber.com	Minnesota Chamber Of Commerce	Suite 1500 400 Robert Street Nor St. Paul, MN 55101	Electronic Service th	No	OFF_SL_15-115_Official
Jerry	Boggs	jerry.boggs@istate.com		N/A	Electronic Service	No	OFF_SL_15-115_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_15-115_Official
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_15-115_Official
Michael	Burr	mtburr@microgridinstitute.o		N/A	Electronic Service	No	OFF_SL_15-115_Official
Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.	12700 West Dodge Road PO Box 2047 Omaha, NE 68103-2047	Electronic Service	No	OFF_SL_15-115_Official
Steve W.	Chriss	Stephen.chriss@walmart.c	Wal-Mart	2001 SE 10th St.  Bentonville, AR 72716-5530	Electronic Service	No	OFF_SL_15-115_Official
Jennifer	Christensen	jchristensen@gpisd.net	Great Plains Institute	2801 21st Ave S Suite 220 Minneapolis, MN 55407	Electronic Service	No	OFF_SL_15-115_Official
City	Clerk	sschulte@ci.albertlea.mn.u s	City of Albert Lea	221 E Clark St  Albert Lea, MN 56007	Electronic Service	No	OFF_SL_15-115_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_15-115_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
William	Crider	William.Crider@target.com	Target Corporation	33 S 6th St CC-2805 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-115_Officia
Carl	Cronin	Regulatory.records@xcele nergy.com	Xcel Energy	414 Nicollet Mall FL 7  Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_15-115_Official
Arthur	Crowell	Crowell.arthur@yahoo.com	A Work of Art Solar	14333 Orchard Rd.  Minnetonka, MN 55345	Electronic Service	No	OFF_SL_15-115_Official
Leigh	Currie	Icurrie@mncenter.org	Minnesota Center for Environmental Advocacy	26 E. Exchange St., Suite 206 St. Paul, Minnesota 55101	Electronic Service	No	OFF_SL_15-115_Official
James	Darabi	james.darabi@solarfarm.co m	Solar Farm, LLC	2355 Fairview Ave #101  St. Paul,  MN  55113	Electronic Service	No	OFF_SL_15-115_Official
Chris	Davis	christopher.davis@state.m n.us	Department of Commerce	Suite 280 85 Seventh Place Eas St. Paul, MN 551012198	Electronic Service st	No	OFF_SL_15-115_Official
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_15-115_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_15-115_Official
John R.	Dunlop, P.E.	JDunlop@RESMinn.com	Renewable Energy Services	Suite 300 448 Morgan Ave. S. Minneapolis, MN 554052030	Electronic Service	No	OFF_SL_15-115_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Rebecca	Eilers	rebecca.d.eilers@xcelener gy.com	Xcel Energy	414 Nicollet Mall - 401 7th Floor	Electronic Service	No	OFF_SL_15-115_Official
				Minneapolis, MN 55401			
James C.	Erickson	jericksonkbc@gmail.com	Kelly Bay Consulting	17 Quechee St Superior, WI 54880-4421	Electronic Service	No	OFF_SL_15-115_Official
Rick	Evans	Rick.Evans@xcelenergy.co m	Xcel Energy	404 Nicollet Mall  Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-115_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_15-115_Official
Nathan	Franzen	nathan@geronimoenergy.c om	Geronimo Energy	7650 Edinborough Way Suite 725 Edina, MN 55435	Electronic Service	No	OFF_SL_15-115_Official
Stacey	Fujii	sfujii@grenergy.com	Great River Energy	12300 Elm Creek Boulevard Maple Grove, MN 553694718	Electronic Service	No	OFF_SL_15-115_Official
Lee	Gabler	Lee.E.Gabler@xcelenergy.	Xcel Energy	404 Nicollet Mall  Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-115_Official
Mark	Garofano	mark.garofano@state.mn.u s	Department of Commerce	85 7th Street East St Paul, MN 55101	Electronic Service	No	OFF_SL_15-115_Official
Katie	Gascoigne	KGascoigne@mnpower.co m	Minnesota Power	30 W Superior St  Duluth, MN 55802	Electronic Service	No	OFF_SL_15-115_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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_15-115_Official
Sam	Gomberg	sgomberg@ucsusa.org	Union of Concerned Scientists	N/A	Electronic Service	No	OFF_SL_15-115_Official
Bill	Grant	Bill.Grant@state.mn.us	Minnesota Department of Commerce	85 7th Place East, Suite 500 St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-115_Official
Alison	Groebner	alison.groebner@state.mn. us	Department of Commerce	85 7th Place E Ste 500 S. Paul, MN 55101	Electronic Service	No	OFF_SL_15-115_Official
David	Grover	dgrover@itctransco.com	ITC Midwest	901 Marquette Avenue Suite 1950 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-115_Official
Timothy	Gulden	info@winonarenewableene rgy.com	Winona Renewable Energy, LLC	1449 Ridgewood Dr Winona, MN 55987	Electronic Service	No	OFF_SL_15-115_Official
Cliff	Haefke	chaefk1@uic.edu	University of Illinois at Chicago	1309 S Halsted  Chicago, IL 60607	Electronic Service	No	OFF_SL_15-115_Official
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_15-115_Official
Andrew	Hall	ahall@allete.com	Minnesota Power	30 W Superior St  Duluth, MN 55802	Electronic Service	No	OFF_SL_15-115_Official
J Drake	Hamilton	hamilton@fresh-energy.org	Fresh Energy	408 St Peter St  Saint Paul, MN 55101	Electronic Service	No	OFF_SL_15-115_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Sam	Hanson	shanson@briggs.com	Briggs And Morgan, P.A.	2200 IDS Center 80 South Eighth Stree Minneapolis, MN 55402	Electronic Service t	No	OFF_SL_15-115_Official
Kim	Havey	kim.havey@state.mn.us	Minnesota Department of Commerce	85 7th Place East  St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-115_Official
Jack	Hays	jack.hays@westwoodps.co m	Westwood Professional Services	7699 Anagram Drive  Eden Prairie, MN 55344	Electronic Service	No	OFF_SL_15-115_Official
Brandon	Heath	bheath@misoenergy.org	MISO Energy	2985 Ames Crossing Rd Eagan, MN 55121	Electronic Service	No	OFF_SL_15-115_Official
Duane	Hebert	duane.hebert@novelenerg y.biz	Novel Energy Solutions	1628 2nd Ave SE Rochester, MN 55904	Electronic Service	No	OFF_SL_15-115_Official
Kimberly	Hellwig	kimberly.hellwig@stoel.co m	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-115_Official
Annete	Henkel	mui@mnutilityinvestors.org	Minnesota Utility Investors	413 Wacouta Street #230 St.Paul, MN 55101	Electronic Service	No	OFF_SL_15-115_Official
Shane	Henriksen	shane.henriksen@enbridge .com	Enbridge Energy Company, Inc.	1409 Hammond Ave FL 2 Superior, WI 54880	Electronic Service	No	OFF_SL_15-115_Official
Holly	Hinman	holly.r.hinman@xcelenergy .com	Xcel Energy	414 Nicollet Mall, 7th Floor Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-115_Official
Adam	Hook	adam.hook@gmail.com		N/A	Electronic Service	No	OFF_SL_15-115_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Michael	Норре	il23@mtn.org	Local Union 23, I.B.E.W.	932 Payne Avenue St. Paul, MN 55130	Electronic Service	No	OFF_SL_15-115_Official
Jim	Horan	Jim@MREA.org	Minnesota Rural Electric Association	11640 73rd Ave N Maple Grove, MN 55369	Electronic Service	No	OFF_SL_15-115_Official
David	Horneck	david.g.horneck@xcelener gy.com	Xcel Energy	1800 Larimer Street  Denver, CO 80202	Electronic Service	No	OFF_SL_15-115_Official
Lori	Hoyum	lhoyum@mnpower.com	Minnesota Power	30 West Superior Street  Duluth,  MN  55802	Electronic Service	No	OFF_SL_15-115_Official
Steve	Huso	steve.huso@xcelenergy.co m	Xcel Energy	G.O. 7th Floor 414 Nicollet Mall Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_15-115_Official
Ralph	Jacobson	ralphj@ips-solar.com		2126 Roblyn Avenue Saint Paul, Minnesota 55104	Electronic Service	No	OFF_SL_15-115_Official
Dwight	Jelle	dkjelle@gmail.com	Best Power International, LLC	P.O. 5126 Hopkins, MN 55343	Electronic Service	No	OFF_SL_15-115_Official
Alan	Jenkins	aj@jenkinsatlaw.com	Jenkins at Law	2265 Roswell Road Suite 100 Marietta, GA 30062	Electronic Service	No	OFF_SL_15-115_Official
Linda	Jensen	linda.s.jensen@ag.state.m n.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota Street St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_15-115_Official
Cindy	Jepsen	ccjepsen@capitolresource mn.com	Capitol Resources	Box 254  Marine On St. Croix, MN 55047	Electronic Service	No	OFF_SL_15-115_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Richard	Johnson	Rick.Johnson@lawmoss.co m	Moss & Barnett	150 S. 5th Street Suite 1200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-115_Official
Cliff	Kaehler	cliff.kaehler@novelenergy. biz	Novel Energy Solutions	N/A	Electronic Service	No	OFF_SL_15-115_Official
Michael	Kampmeyer	mkampmeyer@a-e- group.com	AEG Group, LLC	260 Salem Church Road  Sunfish Lake, Minnesota 55118	Electronic Service	No	OFF_SL_15-115_Official
Mark J.	Kaufman	mkaufman@ibewlocal949.org	IBEW Local Union 949	12908 Nicollet Avenue South  Burnsville, MN 55337	Electronic Service	No	OFF_SL_15-115_Official
John	Kearney	jmkearney@MnSEIA.org	MnSEIA	2512 33rd Ave S Minneapolis, MN 55406	Electronic Service	No	OFF_SL_15-115_Official
Kevin	Keene	kevin.keene@cummins.co m		N/A	Electronic Service	No	OFF_SL_15-115_Official
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_15-115_Official
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_15-115_Official
Kerry	Klemm	kerry.r.klemm@xcelenergy.com	Xcel Energy Services, Inc	414 Nicollet Mall  Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-115_Official
Jack	Kluempke	Jack.Kluempke@state.mn. us	Minnesota Department of Commerce	85 7th Place East Suite 600 St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-115_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Thomas	Koehler	TGK@IBEW160.org	Local Union #160, IBEW	2909 Anthony Ln  St Anthony Village, MN 55418-3238	Electronic Service	No	OFF_SL_15-115_Official
Jon	Kramer	sundialjon@gmail.com	Sundial Solar	3209 W 76th St Edina, MN 55435	Electronic Service	No	OFF_SL_15-115_Official
Michael	Krause	michaelkrause61@yahoo.c om	Kandiyo Consulting, LLC	433 S 7th Street Suite 2025 Minneapolis, Minnesota 55415	Electronic Service	No	OFF_SL_15-115_Official
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_15-115_Official
Jim	Krueger	jkrueger@fmcs.coop	Freeborn-Mower Cooperative Services	Box 611  Albert Lea, MN 56007	Electronic Service	No	OFF_SL_15-115_Official
Allen	Krug	allen.krug@xcelenergy.co m	Xcel Energy	414 Nicollet Mall-7th fl  Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-115_Official
Scott	Kurtz	Scott.J.Kurtz@xcelenergy.c om	Xcel Energy	825 Rice Street  St. Paul, MN 55117	Electronic Service	No	OFF_SL_15-115_Official
Holly	Lahd	holly.lahd@target.com	Target Corporation	33 South 6th St CC-28662 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-115_Official
James D.	Larson	james.larson@avantenergy .com	Avant Energy Services	220 S 6th St Ste 1300  Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-115_Official
Douglas	Larson	dlarson@dakotaelectric.co m	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	OFF_SL_15-115_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Amy	Liberkowski	amy.a.liberkowski@xcelen ergy.com	Xcel Energy	414 Nicollet Mall 7th Floor Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_15-115_Official
Carl	Linvill	clinvill@raponline.org	Regulatory Assistance Project	50 State Street Suite #3  Montpelier, VT 05602	Electronic Service	No	OFF_SL_15-115_Official
Matthew P	Loftus	matthew.p.loftus@xcelener gy.com	Xcel Energy	414 Nicollet Mall FL 5  Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-115_Official
Bob	Long	rlong@larkinhoffman.com	Larkin Hoffman (Silicon Energy)	1500 Wells Fargo Plaza 7900 Xerxes Ave S Bloomington, MN 55431	Electronic Service	No	OFF_SL_15-115_Official
Susan	Ludwig	sludwig@mnpower.com	Minnesota Power	30 West Superior Street  Duluth, MN 55802	Electronic Service	No	OFF_SL_15-115_Official
Paula	Maccabee	Pmaccabee@justchangela w.com	Just Change Law Offices	1961 Selby Ave Saint Paul, MN 55104	Electronic Service	No	OFF_SL_15-115_Official
Susan	Mackenzie	susan.mackenzie@state.m n.us	Public Utilities Commission	121 7th Place E Ste 350  St. Paul, MN 551012147	Electronic Service	No	OFF_SL_15-115_Official
Kavita	Maini	kmaini@wi.rr.com	KM Energy Consulting LLC	961 N Lost Woods Rd Oconomowoc, WI 53066	Electronic Service	No	OFF_SL_15-115_Official
Jerome	Malmquist	malmq003@umn.edu	University of Minnesota	319 15th Ave SE 400 Donhowe Minneapolis, MN 55455	Electronic Service	No	OFF_SL_15-115_Official
Pam	Marshall	pam@energycents.org	Energy CENTS Coalition	823 7th St E St. Paul, MN 55106	Electronic Service	No	OFF_SL_15-115_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Mary	Martinka	mary.a.martinka@xcelener gy.com	Xcel Energy Inc	414 Nicollet Mall 7th Floor Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-115_Official
Natalie	McIntire	natalie.mcintire@gmail.com	Wind on the Wires	570 Asbury St Ste 201 Saint Paul, MN 55104-1850	Electronic Service	No	OFF_SL_15-115_Official
Graeme	Miller	gmille7@uic.edu	University of Illinois at Chicago	1309 S Halsted Chicago, IL 60607	Electronic Service	No	OFF_SL_15-115_Official
Stacy	Miller	stacy.miller@state.mn.us	Department of Commerce	State Energy Office 85 7th Place East, Su 500 St. Paul, MN 55101	Electronic Service ite	No	OFF_SL_15-115_Official
Herbert	Minke	hminke@allete.com	Minnesota Power	30 W Superior St  Duluth, MN 55802	Electronic Service	No	OFF_SL_15-115_Official
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St  Duluth, MN 558022093	Electronic Service	No	OFF_SL_15-115_Official
Curt	Monteith	curtis.g.monteith@xcelener gy.com	Xcel Energy	414 Nicollet Mall  Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-115_Official
Andrew	Moratzka	andrew.moratzka@stoel.co m	Stoel Rives LLP	33 South Sixth St Ste 4200  Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-115_Official
Martin	Morud	mmorud@trunorthsolar.co m	Tru North Solar	5115 45th Ave S Minneapolis, MN 55417	Electronic Service	No	OFF_SL_15-115_Official
Carl	Nelson	cnelson@mncee.org	Center for Energy and Environment	212 3rd Ave N Ste 560  Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-115_Official

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_15-115_Official
Will	Nissen	nissen@fresh-energy.org	Fresh Energy	408 St. Peter Street Ste 220 Saint Paul, MN 55102	Electronic Service	No	OFF_SL_15-115_Official
Michael	Noble	noble@fresh-energy.org	Fresh Energy	Hamm Bldg., Suite 220 408 St. Peter Street St. Paul, MN 55102	Electronic Service	No	OFF_SL_15-115_Official
Rolf	Nordstrom	rnordstrom@gpisd.net	Great Plains Institute	2801 21ST AVE S STE 220  Minneapolis, MN 55407-1229	Electronic Service	No	OFF_SL_15-115_Official
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_15-115_Official
Kate	O'Connell	kate.oconnell@state.mn.us	Department of Commerce	Suite 50085 Seventh Place East  St. Paul, MN 551012198	Electronic Service	No	OFF_SL_15-115_Official
Greg	Padden	gpadden@grenergy.com	Great River Energu	12300 Elm Creek Blvd Maple Grove, MN 55369	Electronic Service	No	OFF_SL_15-115_Official
Nick	Paluck	nick.paluck@xcelenergy.co m	Xcel Energy	7th Floor 414 Nicollet Mall Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_15-115_Official
James	Pearson	james.g.pearson@xcelener gy.com	Xcel Energy	414 Nicollet Mall  Minneapolis,  MN  55401	Electronic Service	No	OFF_SL_15-115_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Susan	Peirce	Susan.Peirce@state.mn.us	Department of Commerce	85 Seventh Place East St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-115_Official
John	Pendray	john.pendray@cummins.co m		N/A	Electronic Service	No	OFF_SL_15-115_Official
Leah	Peterson	lpeterson11@gmail.com		N/A	Electronic Service	No	OFF_SL_15-115_Official
Jessica	Peterson	jessica.k.peterson@xcelen ergy.com	Xcel Energy	414 Nicollet Mall GO 6 Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-115_Official
Donna	Pickard	dpickardgsss@gmail.com	Genie Solar Support Services	1215 Lilac Lane Excelsior, MN 55331	Electronic Service	No	OFF_SL_15-115_Official
Jerry	Pittman	jerry.pittman@charter.net		N/A	Electronic Service	No	OFF_SL_15-115_Official
Marcia	Podratz	mpodratz@mnpower.com	Minnesota Power	30 W Superior S  Duluth, MN 55802	Electronic Service	No	OFF_SL_15-115_Official
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_15-115_Official
Gayle	Prest	gayle.prest@minneapolism n.gov	City of Mpls Sustainability	350 South 5th St, #315  Minneapolis, MN 55415	Electronic Service	No	OFF_SL_15-115_Official
Chris	Psihos	Chris.psihos@idealenergie s.com	Ideal Energies, LLC	5810 Nicollet Ave  Minneapolis, MN 55419	Electronic Service	No	OFF_SL_15-115_Official
Doug	Renier	doug.renier@state.mn.us	Department of Commerce	85 7th Place E Ste 500  St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-115_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Richard	Savelkoul	rsavelkoul@martinsquires.com	Martin & Squires, P.A.	332 Minnesota Street Ste W2750 St. Paul,	Electronic Service	No	OFF_SL_15-115_Official
				MN 55101			
Thomas	Scharff	thomas.scharff@versoco.c om	Verso Corp	600 High Street  Wisconsin Rapids, WI 54495	Electronic Service	No	OFF_SL_15-115_Official
Larry L.	Schedin	Larry@LLSResources.com	LLS Resources, LLC	332 Minnesota St, Ste W1390 St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-115_Official
Kevin	Schwain	Kevin.D.Schwain@xcelene rgy.com	Xcel Energy	404 Nicollet Mall  Minneapolis,  MN  55401	Electronic Service	No	OFF_SL_15-115_Official
Janet	Shaddix Elling	jshaddix@janetshaddix.co m	Shaddix And Associates	7400 Lyndale Ave S Ste 190 Richfield, MN 55423	Electronic Service	Yes	OFF_SL_15-115_Official
David	Shaffer	shaff081@gmail.com	Minnesota Solar Energy Industries Project	1005 Fairmount Ave Saint Paul, MN 55105	Electronic Service	No	OFF_SL_15-115_Official
Patricia	Sharkey	psharkey@environmentalla wcounsel.com	Midwest Cogeneration Association.	180 N. LaSalle Street Suite 3700 Chicago, Illinois 60601	Electronic Service	No	OFF_SL_15-115_Official
Gary	Shaver	gshaver@silicon- energy.com	Silicon Energy	3506 124th St NE Marysville, WA 98271	Electronic Service	No	OFF_SL_15-115_Official
Erin	Shea	eshea@silicon-energy.com	Silicon Energy	PO Box 376 8787 Silicon Way Mt Iron, MN 55768	Electronic Service	No	OFF_SL_15-115_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Doug	Shoemaker	dougs@mnRenewables.or	MRES	2928 5th Ave S  Minneapolis, MN 55408	Electronic Service	No	OFF_SL_15-115_Official
Ken	Smith	ken.smith@districtenergy.c om	District Energy St. Paul Inc.	76 W Kellogg Blvd St. Paul, MN 55102	Electronic Service	No	OFF_SL_15-115_Official
Sara	Smith	sara.smith@metc.state.mn.	Metropolitan Council	390 Robert St N  St. Paul, MN 55101-1805	Electronic Service	No	OFF_SL_15-115_Official
Russ	Stark	Russ.Stark@ci.stpaul.mn.u s	City of St. Paul	390 City Hall 15 West Kellogg Bould Saint Paul, MN 55102	Electronic Service evard	No	OFF_SL_15-115_Official
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_15-115_Official
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_15-115_Official
Eric	Swanson	eswanson@winthrop.com	Winthrop & Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	OFF_SL_15-115_Official
Craig	Tarr, PE	ctarr@energyconcepts.us	Energy Concepts	2349 Willis Niller Dr Hudson, WI 54016	Electronic Service	No	OFF_SL_15-115_Official
Leisa	Thompson	N/A	Metropolitan Council	390 Robert St N Saint Paul, MN 55101-1805	Paper Service	No	OFF_SL_15-115_Official
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_15-115_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Daniel	Tonder	d.tonder@mnpower.com	Minnesota Power	PO Box 60  Little Falls, MN 56345	Electronic Service	No	OFF_SL_15-115_Official
ise	Trudeau	lise.trudeau@state.mn.us	Department of Commerce	85 7th Place East Suite 500 Saint Paul, MN 55101	Electronic Service	No	OFF_SL_15-115_Official
Karen	Turnboom	karen.turnboom@versoco.c om	Verso Corporation	100 Central Avenue  Duluth, MN 55807	Electronic Service	No	OFF_SL_15-115_Official
Ken	Valley	ken@epfsolar.com	EPF Solar	825 Nicollet, #1510  Minneapolis, MN 55402	Electronic Service	No	OFF_SL_15-115_Official
Erick	Van Meter	evanmete@umn.edu	University of Minnesota	N/A	Electronic Service	No	OFF_SL_15-115_Official
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_15-115_Official
Kevin	Walli	kwalli@fryberger.com	Fryberger, Buchanan, Smith & Frederick	380 St. Peter St Ste 710  St. Paul, MN 55102	Electronic Service	No	OFF_SL_15-115_Official
Elizabeth	Wefel	eawefel@flaherty- hood.com	Missouri River Energy Services	3724 W Avera Drive PO Box 88920 Sioux Falls, SD 57109-8920	Electronic Service	No	OFF_SL_15-115_Official
Scott M.	Wilensky	scott.wilensky@xcelenergy.com	Xcel Energy	7th Floor 414 Nicollet Mall Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_15-115_Official
Cam	Winton	cwinton@mnchamber.com	Minnesota Chamber of Commerce	400 Robert Street North Suite 1500 St. Paul, Minnesota 55101	Electronic Service	No	OFF_SL_15-115_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Steven	Wishart	steven.w.wishart@xcelener gy.com	Xcel Energy	7th Floor 414 Nicollet Mall Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_15-115_Official
Robyn	Woeste	robynwoeste@alliantenerg y.com	Interstate Power and Light Company	200 First St SE  Cedar Rapids, IA 52401	Electronic Service	No	OFF_SL_15-115_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_15-115_Official
Adam	Zoet	adam.zoet@state.mn.us	Department of Commerce	85 7th Place E Ste 500 St. Paul, MN 55101	Electronic Service	No	OFF_SL_15-115_Official