



City Council Memorandum

To: Mayor Fasbender & City Councilmembers
From: Chris Jenkins, Parks & Recreation Director
Date: October 7, 2024
Item: Xcel Interconnection Agreement

Council Action Requested: Approve Interconnection Agreement with Excel Energy.

Background Information: Improvements to the Hastings Civic Arena include installation of a solar array on the West Rink Roof. To integrate the solar array with the electrical grid, a interconnection agreement with Xcel Energy, our electrical supplier, is necessary. The installation and connection of the solar array is anticipated to occur in 2024.

Staff recommend approval of the interconnection agreement subject to minor modifications as approved by the City Attorney.

Financial Impact: Positive impact on City budget is expected through an annual reduction in overall electrical expanses.

Advisory Commission Discussion: N/A

Council Committee Discussion: N/A

Attachments:

- Interconnection Agreement

414 Nicollet Mall
Minneapolis, MN 55401



1-800-895-4999
xcelenergy.com

Sep 18, 2024

DER Study Results (Design/Construction Required)

Interconnection Customer/Owner Name: City of Hastings
DER Location: 2801 Red Wing Blvd., Hastings Minnesota 55033
Project Description: 125 kW MN DIP Project

Xcel Energy is pleased to deliver a proposed Interconnection Agreement (MN DIA) and good faith estimate which is an engineering indicative cost estimate for the Minnesota Distributed Energy Resource Interconnection Process (MN DIP) application for the above-referenced site:

| Application # | Name / Project Name | AC Nameplate Capacity (kW) |
|--------------------------|-----------------------------------|----------------------------|
| 05766897 | APEX - City Of Hastings Ice Arena | 125 |

The engineering indicative cost estimate has identified scope and costs to accommodate 125 kW at .98 leading power factor, or where applicable the dynamic power factor, as described in Attachment 5.

This fixed power factor is required to keep steady state voltages within the ANSI C84.1-2011 Range A on the electric distribution system serving this site.

Our indicative estimated cost for proceeding with maximum kW allowed for this proposed project at the above site is \$0.00. This is the sum of the amounts in Attachments 2 and 6 contained in the attached Interconnection Agreement (MN DIA).

For applications subject to the Xcel Energy Cost Sharing Program, which applies to applications under 40 kW AC deemed complete after January 1, 2023: The Cost Sharing Fund has allocated \$0.00 for the above work. This leaves the Interconnection Customer's up-front share of the above work as \$0.00. A description of required upgrades can be found in Attachments 2 and 6.

This estimate is based on the content of the application as of the date it was deemed complete and we began our review for purposes of determining the good faith indicative estimated cost within the MN DIP time frame as set forth in our tariff. Please keep in mind that the costs in Attachments 2 and 6 are based on general assumptions as outlined in the MN DIA and any project-specific information provided or reviewed as part of the Facilities Study performed under MN DIP Attachment 7. The above figures can vary significantly and the customer will be responsible for the actual costs of the project.

The milestone schedule is outlined in Attachment 4 to the attached MN DIA. Please review this closely as this has particular requirements including the manner and method of providing notice for completion of certain milestone line items.

Please note that you need to provide or verify certain information or signatures on the following:

- 1.) Provide contact or identifying information on Sheets 251, 271, 272 and 273 of the attached MN DIA,
- 2.) Sign the MN DIA on Sheet 273,
- 3.) Sign Attachment 4 to the attached MN DIA,
- 4.) Provide the 24/7 contact information on Attachment 5, par. 9.3 to the attached MN DIA.

You have the option of further proceeding with this project at the capacity allowed based on the provisions of the attached MN DIA, consistent with MN DIP 5.1.2, if within 30 Business Days of this letter you sign and return the attached MN DIA with the other information and signatures detailed above. If this is not timely done, your application shall be deemed withdrawn and the attached proposed MN DIA cannot be used. Consistent with MN DIP 5.6.4.1. by the time you sign the MN DIA you also must pay the full amount of the above estimated cost not covered by the Cost Sharing Fund (if applicable). You agree to pay the actual costs consistent with the MN DIA and comply with all provisions of the applicable agreements and tariffs.

Pursuant to Minn. R. 7835.4750, please note that the Commission's interconnection standards as established in MPUC Docket No. E002/M-18-714 (or subsequent docket) are set forth in our Section 10 Tariff which as of the date of this letter is available at this link:
https://www.xcelenergy.com/staticfiles/xcel-responsive/Company/Rates%20&%20Regulations/Rate%20Cases/Me_Section_10.pdf

Consistent with the MPUC's January 22, 2020 order in Docket No. E-999/CI-16-521, the Minnesota Technical Requirements comprise both the TIIR and TSM which first became effective on July 1, 2020. After this effective date, the current versions of the TIIR and the Area EPS Operator's TSM can be accessed at the following link:
https://www.xcelenergy.com/working_with_us/how_to_interconnect. In the event that this link changes over time or no longer points to the then-current TIIR or TSM, the Interconnection Customer can contact the Area EPS Operator for instruction on how to access the then-current versions of these documents.

In addition to the information in the MN DIA, we want to alert you that for us to execute this MN DIA, if the name of your corporation or LLC on the MN DIA is not registered with the Minnesota Secretary of State (either as a Minnesota corporation, Minnesota LLC, or as an out of state corporation or LLC transacting business in Minnesota) you will need to provide documentation showing that this is a legal entity.

1. We only want to enter into contracts with legal entities (such as corporations, LLCs or persons). We intend to verify that each entity claiming to be a corporation or LLC is a legal entity through the Minnesota Secretary of State website. If the legal entity has been formed in another state, you must provide us documentation showing this.
2. If this is not a legal entity, you must immediately provide us with the name(s) of actual legal entities to put on the applicable MN DIA. Any adjustments to your Interconnection Agreement documents to accommodate a request for changing names will not extend your 30 Business Day timeline to execute the MN DIA and all associated payments and other requirements. Please plan accordingly.

Study Results and Construction Estimates:

This letter and the attached MN DIA together provide system requirements and cost estimates of system modifications necessary for interconnection of the project identified above. The requirements for this project have been broken into two sections: operational requirements and system modifications. Operational requirements include DER facility size, settings, or procedures necessary to interconnect the proposed system. System modifications are physical equipment modifications that Xcel Energy will need to make to distribution and substation facilities for the interconnection to be feasible.

A model of the feeder, on which the DER unit would interconnect, was created for the purpose of studying the feasibility of the proposed interconnection. The system impact study analyzed rapid voltage change, grounding issues, metering/monitoring, and short circuit protection to determine impacts on the Xcel Energy distribution system.

In addition, a facility study has been prepared to determine the above referenced good faith engineering indicative estimate of Distribution and Substation costs required to accommodate this project. This facility study was based on the data provided by the Interconnection Customer as part of MN DIP Attachment 7. However, the indicative cost estimate is generally based on typical conditions encountered on past construction projects, which may or may not be directly comparable.

Below is a list of additional considerations uncovered during the study.

- **Operational**
 - Short Circuit Analysis
 - Additional fault current information may be found in the Xcel Energy Standard for *Electric Service* and Use book. Secondary services refer to Tables found in Section 5.
 - These values can and will change due to various circumstances. Xcel Energy personnel shall not be held responsible for any damage to property or person resulting from the use of this data.
 - These values do not include the applied-for DER contribution.
 - A transmission system assessment is not required.

Please upload the executed MN DER Interconnection Agreement (MN DIA) package (including attachments) to the portal.

Please contact us at SolarProgramMN@xcelenergy.com if you have any questions regarding this information.

We look forward to working with you to bring more DER choices to our customers.

Thank you,

Minnesota Solar*Rewards Program

Xcel Energy

414 Nicollet Mall, 401-6, Minneapolis, MN 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**MINNESOTA DISTRIBUTED ENERGY RESOURCE
INTERCONNECTION AGREEMENT (MN DIA)**

Section No. 10
Original Sheet No. 250

Minnesota Distributed Energy Resource Interconnection Agreement (MN DIA)

V. 2.3

(As adopted for Northern States Power Company)

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Date Filed: 12-14-18

By: Christopher B. Clark

Effective Date: 05-09-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-18-714

Order Date: 05-09-19

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**MINNESOTA DISTRIBUTED ENERGY RESOURCE
INTERCONNECTION AGREEMENT (MN DIA)**

Section No. 10
Original Sheet No. 251

This Interconnection Agreement ("Agreement") is made and entered into Sep 18, 2024 by Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy ("Area EPS Operator"), and City of Hastings ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

Area EPS Operator Information

Area EPS Operator: Northern States Power Company, a Minnesota corporation

Attention: DER Interconnection

Address: 414 Nicollet Mall (401 - 6th Floor)

City: Minneapolis State: MN Zip: 55401

Phone: 1-800-895-4999

Email: SRCMN@xcelenergy.com (for Solar*Rewards Community (Community Solar Gardens))
SolarProgramMN@xcelenergy.com (for all other DER interconnections)

Interconnection Customer Information

Interconnection Customer: City of Hastings

Attention: APEX - City Of Hastings Ice Arena

Address: 2801 Red Wing Blvd.

City: Hastings State: Minnesota Zip: 55033

Phone: 651-480-2350 Email: mayormary@hastingsmn.gov

Interconnection Customer Application No: 05766897

Distributed Energy Resource Information (To be completed by the Area EPS Operator)

Type of DER System (e.g.Solar, Wind, CHP, Solar+Storage): Solar PV

Nameplate Rating: 125 kW (ac); DER capacity (as described in MN DIP 5.14.3): 125.000 kW (ac)

Address of DER System: (DER Street Address or GPS Coordinates, if applicable) 2801 Red Wing Blvd.

City: Hastings State: Minnesota Zipcode: 55033

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

1. Article 1. Scope and Limitations of Agreement

- 1.1 This Agreement is intended to provide for the Interconnection Customer to interconnect at the Point of Common Coupling and operate a Distributed Energy Resource with a Nameplate Rating of 10 Megawatts (MW) or less in parallel with the Area EPS at the location identified above and in the Interconnection Application.

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**MINNESOTA DISTRIBUTED ENERGY RESOURCE
INTERCONNECTION AGREEMENT (MN DIA)**

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- 1.2 This Agreement shall be used for all Interconnection Applications submitted under the Minnesota Distributed Energy Resources Interconnection Process (MN DIP) except for those submitted and processed under the Simplified Process contained in MN DIP Section 2 or qualify and chooses under MN DIP Section 1.1.5 for the Uniform Statewide Contract to replace the need for this Agreement.
- 1.3 This Agreement governs the terms and conditions under which the Interconnection Customer's Distributed Energy Resource will interconnect with, and operate in parallel with, the Area EPS Operator's Distribution System.
- 1.4 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1, the MN DIP, or the body of this Agreement.
- 1.5 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity with the applicable Area EPS Operator.
- 1.6 Nothing in this Agreement is intended to affect any other agreement between the Area EPS Operator and the Interconnection Customer.
- 1.7 Responsibilities of the Parties
 - 1.7.1 The Parties shall perform all obligations of this Agreement in accordance with the MN DIP, Minnesota Technical Requirements, all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.
 - 1.7.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Distributed Energy Resource and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule and, in accordance with this Agreement, and with Good Utility Practice.
 - 1.7.3 The Area EPS Operator shall construct, operate, and maintain its Distribution System and its Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

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**MINNESOTA DISTRIBUTED ENERGY RESOURCE
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- 1.7.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with the Minnesota Technical Requirements and this Agreement; including, applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Distributed Energy Resource so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Area EPS Operator and any Affected Systems.
- 1.7.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now owns or subsequently owns unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of common coupling. The Area EPS Operator and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Area EPS Operator's Distribution System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.
- 1.7.6 The Area EPS Operator shall coordinate with all Affected Systems to support the interconnection.
- 1.8 Parallel Operation Obligations
- Once the Distributed Energy Resource has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Distributed Energy Resource in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for the Area EPS Operator's Distribution System provided or referenced in an attachment to this Agreement and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement. The Minnesota Technical Requirements for interconnection are covered in a separate document, a copy of which has been made available to the Interconnection Customer and incorporated and made part of this Agreement by this reference.
- 1.9 Metering
- As described in MN DIP 5.4, the Interconnection Customer shall be responsible for the Area EPS Operator's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

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**MINNESOTA DISTRIBUTED ENERGY RESOURCE
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1.10 Distributed Energy Resource Capabilities and Grid Reliability

1.10.1 The Minnesota Technical Requirements outlines the Parties responsibilities consistent with IEEE 1547 Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces which provides requirements relevant to the interconnection and interoperability performance, operation and testing, and, to safety, maintenance and security considerations.

1.10.2 The Area EPS Operator may offer the Interconnection Customer the option to utilize required DER capabilities to mitigate Interconnection Customer costs related to Upgrades or Interconnection Facilities to address anticipated system impacts from the engineering review (i.e., Initial Review, Supplemental Review, or Study Process described in the MN DIP.)

2. Article 2. Inspection, Testing, Authorization, and Right of Access

2.1 Equipment Testing and Inspection

As described in MN DIP Section 5.7, the Interconnection Customer shall test and inspect its Distributed Energy Resource and Interconnection Facilities prior to interconnection pursuant to Minnesota Technical Requirements and this Agreement.

2.2 Authorization Required Prior to Parallel Operation

As described in MN DIP Section 5.8, the Area EPS Operator shall use Reasonable Efforts to list applicable parallel operation requirements by attaching the Minnesota Technical Requirements and/or including them in Attachment 5 to this Agreement. Additionally, the Area EPS Operator shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. Pursuant to the MN DIP 5.8.2, the Interconnection Customer shall not operate its Distributed Energy Resource in parallel with the Area EPS Operator's Distribution System without prior written authorization of the Area EPS Operator.

2.3 Right of Access

2.3.1 Upon reasonable notice, the Area EPS Operator may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Distributed Energy Resource first produces energy to inspect the interconnection, and observe the commissioning of the Distributed Energy Resource (including any required testing), startup, and operation for a period of up to three Business Days after initial startup of the unit. In addition, the Interconnection Customer shall notify the Area EPS Operator at least five Business Days prior to conducting any on-site verification testing of the Distributed Energy Resource.

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**MINNESOTA DISTRIBUTED ENERGY RESOURCE
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2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Area EPS Operator shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.

2.3.3 Each Party shall be responsible for its costs associated with following this article as outlined in MN DIP Section 5.7.2 and the Minnesota Technical Requirements.

3. Article 3. Effective Date, Term, Termination, and Disconnection

3.1 Effective Date

This Agreement shall become effective upon execution by the Parties.

3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect from the Effective Date unless terminated earlier in accordance with article 3.3 of this Agreement.

3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination.

3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Area EPS Operator 20 Business Days written notice.

Either Party may terminate this Agreement after Default pursuant to article 7.7.

3.3.3 Upon termination of this Agreement, the Distributed Energy Resource will be disconnected from the Area EPS Operator's Distribution System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this MN DIA or such non-terminating Party otherwise is responsible for these costs under this MN DIA.

3.3.4

3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

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**MINNESOTA DISTRIBUTED ENERGY RESOURCE
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3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

3.4.1 Emergency Conditions

Under Emergency Conditions, the Area EPS Operator may immediately suspend interconnection service and temporarily disconnect the Distributed Energy Resource. The Area EPS Operator shall use Reasonable Efforts to notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Distributed Energy Resource. The Interconnection Customer shall use Reasonable Efforts to notify the Area EPS Operator promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Area EPS Operator's Distribution System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Area EPS Operator may interrupt interconnection service or curtail the output of the Distributed Energy Resource and temporarily disconnect the Distributed Energy Resource from the Area EPS Operator's Distribution System when necessary for routine maintenance, construction, or repairs on the Area EPS Operator's Distribution System. The Area EPS Operator shall use Reasonable Efforts to provide the Interconnection Customer with three Business Days notice prior to such interruption. The Area EPS Operator shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

3.4.3 Forced Outage

During any forced outage, the Area EPS Operator may suspend interconnection service to effect immediate repairs on the Area EPS Operator's Distribution System. The Area EPS Operator shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Area EPS Operator shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**MINNESOTA DISTRIBUTED ENERGY RESOURCE
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3.4.4 Adverse Operating Effects

The Area EPS Operator shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Distributed Energy Resource may cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Distributed Energy Resource could cause damage to the Area EPS Operator's Distribution System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Area EPS Operator may disconnect the Distributed Energy Resource. The Area EPS Operator shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Distributed Energy Resource

The Interconnection Customer must receive written authorization from the Area EPS Operator before making any change to the Distributed Energy Resource that may have a material impact on the safety or reliability of the Distribution System. Such authorization shall not be unreasonably withheld if the modification is not a Material Modification. Material Modifications, including an increase nameplate rating or capacity, may require the Interconnection Customer to submit a new Interconnection Application as described in MN DIP Section 1.6.2. If the Interconnection Customer makes such modification without the Area EPS Operator's prior written authorization, the latter shall have the right to temporarily disconnect the Distributed Energy Resource.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Distributed Energy Resource, Interconnection Facilities, and the Area EPS Operator's Distribution System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

3.4.7 Treatment Similar to Other Retail Customers

If the Interconnection Customer receives retail electrical service at the same site as the Distributed Energy Resource, it may also be disconnected consistent with the rules and practices for disconnecting other retail electrical customers.

3.4.8 Disconnection for Default

If the Interconnection Customer is in Default it may be disconnected after a 60 day written notice is provided and the Default is not cured during this 60 day notice. This provision does not apply to disconnection based on Emergency Conditions.

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**MINNESOTA DISTRIBUTED ENERGY RESOURCE
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Section No. 10
Original Sheet No. 258

4. Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades

4.1 Interconnection Facilities

4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Area EPS Operator shall provide a good faith estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Area EPS Operator.

4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Area EPS Operator's Interconnection Facilities.

4.2 Distribution Upgrades

The Area EPS Operator shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. The Area EPS Operator shall provide a good faith estimate cost, including overheads, for the purchase and construction of the Distribution Upgrades and provide a detailed itemization of such costs. If the Area EPS Operator and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

5. Article 5. Cost Responsibility for Network Upgrades

5.1 Applicability

No portion of this Article 5 shall apply unless the interconnection of the Distributed Energy Resource requires Network Upgrades.

5.2 Network Upgrades

The Area EPS Operator or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. The Area EPS Operator shall provide a good faith estimate cost, including overheads, for the purchase and construction of the Network Upgrades and provide a detailed itemization of such costs. If the Area EPS Operator and the Interconnection Customer agree, the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Area EPS Operator elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**MINNESOTA DISTRIBUTED ENERGY RESOURCE
INTERCONNECT AGREEMENT (MN DIA)**

Section No. 10
Original Sheet No. 259

- 5.2.1 Repayment of Amounts Advanced for Network Upgrades
The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to the Area EPS Operator and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be paid to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Area EPS Operator's Tariff and Affected System's Tariff for transmission services with respect to the Distributed Energy Resource. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.
- 5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Area EPS Operator, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Area EPS Operator and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to the Interconnection Customer any amounts advanced for Network Upgrades not previously repaid, or (2) declare in writing that the Area EPS Operator or any applicable Affected System operators will continue to provide payments to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond 20 years from the commercial operation date.
- 5.2.1.2 If the Distributed Energy Resource fails to achieve commercial operation, but it or another Distributed Energy Resource is later constructed and requires use of the Network Upgrades within five (5) years of being constructed, the Area EPS Operator and Affected System operator (after receiving payment in the amount of the cost to build these Network Upgrades from the other Distributed Energy Resource who is expected to use the Network Upgrades) shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the Distributed Energy Resource, if different, is responsible for identifying the entity to which reimbursement must be made.

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**MINNESOTA DISTRIBUTED ENERGY RESOURCE
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Section No. 10
Original Sheet No. 260

- 5.3 Special Provisions for Affected Systems
Unless the Area EPS Operator provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.
- 5.4 Rights Under Other Agreements
Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Distributed Energy Resource.

Article 6. Billing, Payment, Milestones, and Financial Security

- 6.1 Billing and Payment Procedures and Final Accounting
- 6.1.1 The Area EPS Operator shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement, and the Interconnection Customer shall pay eachbill, pursuant to the MN DIP 5.6.5, or as otherwise agreed to by the Parties.
- 6.1.2 Within 80 Business Days (approximately 4 calendar months) of completing the construction and installation of the Area EPS Operator's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Area EPS Operator shall provide the Interconnection Customer with a final accounting report, as described in the MN DIP 5.6.6.
- 6.2 Milestones
Pursuant to the MN DIP 4.4.5, 5.6.2 and 5.6.3, the Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement.
- 6.3 Financial Security Arrangements
Pursuant to the MN DIP 5.6.4, the Interconnection Customer shall provide the Area EPS Operator, at the Interconnection Customer's option, a guarantee, letter of credit or other form of security that is reasonably acceptable to the Area EPS Operator and is consistent with the Minnesota Uniform Commercial Code. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Area EPS Operator's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Area EPS Operator under this Agreement during its term. In addition:

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- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Area EPS Operator, and contain terms and conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.
- 6.3.2 The letter of credit must be issued by a financial institution or insurer reasonably acceptable to the Area EPS Operator and must specify a reasonable expiration date not sooner than sixty (60) Business Days (three calendar months) after the due date for the issuance of the final bill.
7. Article 7. Assignment, Liability, Non-Warranty, Indemnity, Force Majeure, Consequential Damages, and Default
- 7.1 Assignment
This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:
- 7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Area EPS Operator of any such assignment.
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Area EPS Operator, for collateral security purposes to aid in providing financing for the Distributed Energy Resource, provided that the Interconnection Customer will promptly notify the Area EPS Operator of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.
- 7.2 Limitation of Liability
Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

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By: Christopher B. Clark

Effective Date: 05-09-19

President, Northern States Power Company, a Minnesota corporation

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- 7.3 Non-Warranty
The Area EPS Operator does not give any warranty, expressed or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Interconnection Customer, including without limitation the Distributed Energy Resource and any structures, equipment, wires, appliances or devices not owned, operated or maintained by the Area EPS Operator.
- 7.4 Indemnity
- 7.4.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.
- 7.4.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.
- 7.4.3 This indemnification obligation shall apply notwithstanding any negligent or intentional acts, errors or omissions of the Indemnified Party, but the Indemnifying Party's liability to indemnify the Indemnified Party shall be reduced in proportion to the percentage by which the Indemnified Party's negligent or intentional acts, errors or omissions caused the damage.
- 7.4.4 Neither Party shall be indemnified for its damages resulting from its sole negligence, intentional acts or willful misconduct. These indemnity provisions shall not be construed to relieve any insurer of its obligation to pay claims consistent with the provisions of a valid insurance policy.
- 7.4.5 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
- 7.4.6 If an indemnifying party is obligated to indemnify and hold any indemnified person harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

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7.4.7 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

7.5 Consequential Damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

7.6 Force Majeure

If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

7.7 Default

7.7.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

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7.7.2 If a Default is not cured as provided in this article, or if a Default is not capable of being cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

8. Article 8. Insurance

- 8.1 An Area EPS Operator may only require an Interconnection Customer to purchase insurance covering damages pursuant to the MN DIP 5.10.
- 8.2 The Area EPS Operator agrees to maintain general liability insurance or self-insurance consistent with the Area EPS Operator's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Area EPS Operator's liabilities undertaken pursuant to this Agreement.
- 8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.
- 8.4 Failure of the Interconnection Customer or Area EPS Operator to enforce the minimum levels of insurance does not relieve the Interconnection Customer from maintaining such levels of insurance or relieve the Interconnection Customer of any liability.

9. Article 9. Confidentiality

- 9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement, design, operating specifications, and metering data provided by the Interconnection Customer may be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such. If requested by either Party, the other Party shall provide in writing the basis for asserting that the information warrants confidential treatment. Parties providing a Governmental Authority trade secret, privileged or otherwise not public or nonpublic data under the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13, shall identify such data consistent with the Commission's September 1, 1999 Revised Procedures for Handling Trade Secret and Privileged Data, available online at: <https://mn.gov/puc/puc-documents/#4>

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- 9.2 Confidential Information does not include information previously in the public domain with proper authorization, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be publicly divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements that could not otherwise be fulfilled by not making the information public.
- 9.2.1 Each Party shall hold in confidence and shall not disclose Confidential Information, to any person (except employees, officers, representatives and agents, who agree to be bound by this section). Confidential Information shall be clearly marked as such on each page or otherwise affirmatively identified. If a court, government agency or entity with the right, power, and authority to do so, requests or requires either Party, by subpoena, oral disposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party with prompt notice of such request(s) or requirements(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of this Agreement. In the absence of a protective order or waiver the Party shall disclose such confidential information which, in the opinion of its counsel, the party is legally compelled to disclose. Each Party will use reasonable efforts to obtain reliable assurance that confidential treatment will be accorded any confidential information so furnished.
- 9.2.2 Critical infrastructure information or information that is deemed or otherwise designated by a Party as Critical Energy/Electric Infrastructure Information (CEII) pursuant to FERC regulation, 18 C.F.R. §388.133, as may be amended from time to time, may be subject to further protections for disclosure as required by FERC or FERC regulations or orders and the disclosing Party's CEII policies.
- 9.2.3 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.
- 9.2.4 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

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10. Article 10. Disputes

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process and associated study and interconnection agreements according to the provisions of this article and Minnesota Administrative Rules 7829.1500-7829.1900. More information on the Commission's Consumer Affairs Office dispute resolution services is available on the Commission's website: <https://mn.gov/puc/consumers/help/complaint/>

Prior to a written Notice of Dispute, the Party shall contact the other Party and raise the issue and the relief sought in an attempt to resolve the issue immediately.

10.3 In the event of a dispute, the disputing Party shall provide the other Party a written Notice of Dispute containing the relevant known facts pertaining to the dispute, the specific dispute and the relief sought, and express notice by the disputing Party that it is invoking the procedures under this article. The Interconnection Customer may utilize the Commission's Consumer Affairs Office's complaint/inquiry form and Informal Complaint dispute resolution process to assist with the written Notice of Dispute. The notice shall be sent to the non-disputing Party's email address and physical address set forth in the interconnection agreement or Interconnection Application, if there is no interconnection agreement. If the Interconnection Customer chooses not to utilize the Commission's Consumer Affairs Office dispute resolution process, the Interconnection Customer shall provide an informational electronic copy of the Notice of Dispute to the Consumer Affairs Office at the Commission at consumer.puc@state.mn.us.

10.4 The non-disputing Party shall acknowledge the notice within three (3) Business Days of its receipt and identify a representative with the authority to make decisions for the non-disputing Party with respect to the dispute.

10.5 The non-disputing Party shall provide the disputing Party with relevant regulatory and/or technical details and analysis regarding the Area EPS Operator interconnection requirements under dispute within ten (10) Business Days of the date of the Notice of Dispute. Within twenty (20) Business Days of the date of the Notice of Dispute, the Parties' authorized representatives will be required to meet and confer to try to resolve the dispute. Parties shall operate in good faith and use best efforts to resolve the dispute.

10.6 If a resolution is not reached in the thirty (30) Business Days from the date of the notice described in section 10.3, the Parties may 1) if mutually agreed, continue negotiations for up to an additional twenty (20) Business Days; or 2) either Party may request the Commission's Consumer Affairs Office provide mediation in an attempt to resolve the dispute within twenty (20) Business Days with the opportunity to extend this timeline upon mutual agreement. Alternatively, both Parties by mutual agreement may request mediation from an outside third-party mediator with costs to be shared equally between the Parties.

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- 10.7 If the results of the mediation are not accepted by one or more Parties and there is still disagreement, the dispute shall proceed to the Commission's Formal Complaint process as described in Minn. Rules 7829.1700-1900 unless mutually agreed to continue with informal dispute resolution.
- 10.8 At any time, either Party may file a complaint before the Commission pursuant to Minn. Stat. §216B.164, if applicable, and Commission rules outlined in Minn. Rules Ch. 7829.

11. Article 11. Taxes

- 11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with Internal Revenue Service and any other relevant local, state and federal requirements.
- 11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. It is incumbent on the Party seeking to maintain its tax status to provide formal written notice to the other Party detailing what exact cooperation it is seeking from the other Party well prior to any deadline by which any such action would need to be taken. Nothing in this Agreement is intended to adversely affect, if applicable, the Area EPS Operator's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

12. Article 12. Miscellaneous

- 12.1 **Governing Law, Regulatory Authority, and Rules**
The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the Minnesota Public Utilities Commission and the laws of the state of Minnesota, without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.
- 12.2 **Amendment**
The Parties may amend this Agreement by a written instrument duly executed by both Parties under the process described below, or under article 12.12 of this Agreement.

If the Parties seek to amend this Agreement by a written instrument duly executed by both Parties, this amendment will need to receive Commission approval prior to it being effective. The Area EPS Operator and Interconnection Customer may seek Commission approval of an amendment to the Interconnection Agreement for use between them for a specific Interconnection Application in the following ways:

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- 12.2.1 File a Petition with the Commission, or
 - 12.2.2 File a Notice with the Commission of the proposed amendment. The Notice should include a copy of the amendment showing in redline format how the amendment would alter the MN DIA between the Area EPS Operator and Interconnection Customer for the Interconnection Application at issue. If no objection or notice of intent to object is filed within 30 days, then the proposed amendment would be considered to be approved by the Commission. If there is a timely filed objection of notice of intent to object, then the proposed amendment would not be considered to have been approved by the Commission and could only be used if the Commission subsequently issues a written order authorizing its use.
 - 12.2.3 Commission approval of an amendment to the Interconnection Agreement is not needed where such an amendment only addresses updating or correcting: 1) information specified in the Interconnection Application; 2) exhibits or attachments to the Interconnection Agreement as long as they are not additional agreements or requirements not covered in the MN DIP or Minnesota Technical Requirements; or 3) information provided in the blank lines to the MN DIA or Uniform Statewide Contract forms.
- 12.3 No Third-Party Beneficiaries
This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.
- 12.4 Waiver
- 12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
 - 12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Area EPS Operator. Any waiver of this Agreement shall, if requested, be provided in writing.

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- 12.5 Entire Agreement
This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement. This Agreement can only be amended or modified in writing signed by both Parties.
- 12.6 Multiple Counterparts
This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument. Electronic signatures are acceptable if the Area EPS Operator has made such a determination pursuant to MN DIP 1.2.1.1.
- 12.7 No Partnership
This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.
- 12.8 Severability
If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.
- 12.9 Security Arrangements
Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.
- 12.10 Environmental Releases
Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Distributed Energy Resource or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

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12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Area EPS Operator be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

12.12 Inclusion of Area EPS Operator Tariffs and Rules

The interconnection services provided under this Agreement shall at all times be subject to the terms and conditions set forth in the tariff schedules and rules applicable to the electric service provided by the Area EPS Operator, which tariff schedules and rules are hereby incorporated into this Agreement by this reference. Notwithstanding any other provisions of this Agreement, the Area EPS Operator shall have the right to unilaterally file with the Minnesota Public Utilities Commission pursuant to the Commission's rules and regulations, an application for change in rates, charges, classification, service, tariff, or rule or any agreement relating thereto. The Interconnection Customer shall also have the right to unilaterally file with the Commission, pursuant to the Commission's rules and regulations, an application for change in rates, charges, classification, service, tariff, or rule or any agreement relating thereto. Each Party shall have the right to protest any such filing by the other Party and/or to participate fully in any proceeding before the Commission in which such modifications may be considered, pursuant to the Commission's rules and regulations.

13. Article 13. Notices

13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national carrier service, or sent by first class mail, postage prepaid, to the person specified below:

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If to the Interconnection Customer:

Interconnection Customer: [[SertifiLG_1_1]]

Attention: [[SertifiLG_1_1]]

Address: [[SertifiLG_1_1]]

City: [[SertifiLG_1_1]]

State: [[SertifiLG_1_1]]

Zip: [[SertifiLG_1_1]]

Phone: [[SertifiLG_1_1]]

Email: [[SertifiLG_1_1]]

If to the Area EPS Operator:

Area EPS Operator: Northern States Power Company, a Minnesota Corporation

Attention: DER Interconnection Program

Address: 414 Nicollet Mall (401 - 6th Floor)

City: Minneapolis State: MN Zip: 55401

Phone: 1-800-895-4999

Email: SRCMN@xcelenergy.com (for solar garden interconnections)

SolarProgramMN@xcelenergy.com (for all other DER interconnections)

13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: [[SertifiLG_1_1]]

Attention: [[SertifiLG_1_1]]

Address: [[SertifiLG_1_1]]

City: [[SertifiLG_1_1]]

State: [[SertifiLG_1_1]]

Zip: [[SertifiLG_1_1]]

Area EPS Operator: Northern States Power Company, a Minnesota Corporation

Attention: DER Interconnection Program

Address: P.O. Box 59

City: Minneapolis State: MN Zip: 55440-0059

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13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone or email to the telephone numbers and email addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: [[SertifiLG_1_1]]

Attention: [[SertifiLG_1_1]]

Address: [[SertifiLG_1_1]]

City: [[SertifiLG_1_1]]

State: [[SertifiLG_1_1]]

Zip: [[SertifiLG_1_1]]

Phone: [[SertifiLG_1_1]]

Email: [[SertifiLG_1_1]]

If to the Area EPS Operator:

Area EPS Operator: Northern States Power Company, a Minnesota Corporation

Attention: DER Interconnection Program

Address: 414 Nicollet Mall (401 - 6th Floor)

City: Minneapolis State: MN Zip: 55401

Phone: 1-800-895-4999

Email: SRCMN@xcelenergy.com (for solar garden interconnections)

SolarProgramMN@xcelenergy.com (for all other DER interconnections)

13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Interconnection Customer: [[SertifiLG_1_1]]

Attention: [[SertifiLG_1_1]]

Address: [[SertifiLG_1_1]]

City: [[SertifiLG_1_1]]

State: [[SertifiLG_1_1]]

Zip: [[SertifiLG_1_1]]

Phone: [[SertifiLG_1_1]]

Email: [[SertifiLG_1_1]]

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Area EPS Operator's Operating Representative:
Area EPS Operator: Northern States Power Company, a Minnesota Corporation
Attention: DER Interconnection Program
Address: 414 Nicollet Mall (401 - 6th Floor)
City: Minneapolis State: MN Zip: 55401
Phone: 1-800-895-4999
Email: SRCMN@xcelenergy.com (for solar garden interconnections)
SolarProgramMN@xcelenergy.com (for all other DER interconnections)

- 13.5 Changes to the Notice Information
Either Party may change this information by giving five Business Days written notice to the other Party prior to the effective date of the change.

14. Article 14. Signatures

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For Northern States Power Company, a Minnesota corporation (Area EPS Operator)–

Signature: _____

Name: [[SertifiLG_2]]

Title: **Director Customer Strategy and Solutions**

Date: _____

For the Interconnection Customer

Signature: _____

Name: City of Hastings

Title: _____

Date: _____

(Continued on Sheet No. 10-274)

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**MINNESOTA DISTRIBUTED ENERGY RESOURCE
INTERCONNECT AGREEMENT (MN DIA)**

Section No. 10
Original Sheet No. 274

Attachment 1: Glossary of Terms

Affected System – Another Area EPS Operator’s system, or Transmission Owner’s Transmission System, or Transmission System connected generation which may be affected by the proposed interconnection.

Applicant Agent – A person designated in writing by the Interconnection Customer to represent or provide information to the Area EPS on the Interconnection Customer’s behalf throughout the interconnection process.

Area EPS - The electric power distribution system connected at the Point of Common Coupling.

Area EPS Operator – An entity that owns, controls, or operates the electric power distribution systems that are used for the provision of electric service in Minnesota.

Business Day – Monday through Friday, excluding Holidays as defined by Minn. Stat. §645.44, Subd. 5. See MN DIP 5.2.1 for more on computation of time.

Certified Equipment - UL 1741 listing is a common form of DER inverter certification. See MN DIP Attachment 4: Certification Codes and Standards and Attachment 5: Certification of Distributed Energy Resource Equipment.

Confidential Information – See MN DIA Article 9.

Distributed Energy Resource (DER) – A source of electric power that is not directly connected to a bulk power system. DER includes both generators and energy storage technologies capable of exporting active power to an EPS. An interconnection system or a supplemental DER device that is necessary for compliance with this standard is part of a DER. For the purpose of the MN DIP and MN DIA, the DER includes the Customer’s Interconnection Facilities but shall not include the Area EPS Operator’s Interconnection Facilities.

Distribution System – The Area EPS facilities which are not part of the Local EPS, Transmission System or any generation system.

Distribution Upgrades – The additions, modifications, and upgrades to the Distribution System at or beyond the Point of Common Coupling to facilitate interconnection of the DER and render the distribution service necessary to effect the Interconnection Customer’s connection to the Distribution System. Distribution Upgrades do not include Interconnection Facilities.

Effective Date – Agreement(s) shall become effective upon execution by the Parties.

Electric Power System (EPS) – The facilities that deliver electric power to a load.

(Continued on Sheet No. 10-275)

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**MINNESOTA DISTRIBUTED ENERGY RESOURCE
INTERCONNECT AGREEMENT (MN DIA)**

Section No. 10
Original Sheet No. 275

Emergency Conditions – a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the Area EPS Operator, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Distribution System, the Area EPS Operator’s Interconnection Facilities or the Distribution Systems of others to which the Distribution System is directly connected; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Distributed Energy Resource or the Interconnection Customer’s Interconnection Facilities.

Fast Track Process – The procedure as described in MN DIP Section 3 for evaluating an Interconnection Application for a Distributed Energy Resource that meets the eligibility requirements of MN DIP section 3.1.

Force Majeure Event – An act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, an order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or another cause beyond a Party’s control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing.

Good Utility Practice – Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and act which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

Governmental Authority – Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Area EPS Operator, or any Affiliate thereof. The Minnesota Public Utilities Commission is the authority governing interconnection requirements unless otherwise provided for in the Minnesota Technical Requirements.

Interconnection Agreement – The terms and conditions between the Area EPS Operator and Interconnection Customer (Parties). See MN DIP Section 1.1.5 for when the Uniform Statewide Contract or MN DIA applies.

Interconnection Application – The Interconnection Customer’s request to interconnect a new or modified, as described in MN DIP Section 1.6, Distributed Energy Resource. See MN DIP Attachment 2 Simplified Application Form and MN DIP Attachment 3 Interconnection Application Form.

Interconnection Customer – The person or entity, including the Area EPS Operator, whom will be the owner of the DER that proposes to interconnect a DER(s) with the Area EPS Operator’s Distribution System. The Interconnection Customer is responsible for ensuring the Distributed Energy Resource(s) is designed, operated and maintained in compliance with the Minnesota Technical Requirements.

(Continued on Sheet No. 10-276)

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

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**MINNESOTA DISTRIBUTED ENERGY RESOURCE
 INTERCONNECT AGREEMENT (MN DIA)**

Section No. 10
 Original Sheet No. 276

Interconnection Facilities – The Area EPS Operator’s Interconnection Facilities and the Interconnection Customer’s Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Distributed Energy Resource and Customer Interconnection System and the Point of Common Coupling, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Distributed Energy Resource to the Area EPS Operator’s System. Some examples of Customer Interconnection Facilities include: supplemental DER devices, inverters, and associated wiring and cables up to the Point of DER Connection. Some examples of Area EPS Operator Interconnection Facilities include sole use facilities; such as, line extensions, controls, relays, switches, breakers, transformers and shall not include Distribution Upgrades or Network Upgrades.

Material Modification – A modification to machine data, equipment configuration or to the interconnection site of the DER at any time after receiving notification by the Area EPS Operator of a complete Interconnection Application that has a material impact on the cost, timing, or design of any Interconnection Facilities or Upgrades, or a material impact on the cost, timing or design of any Interconnection Application with a later Queue Position or the safety or reliability of the Area EPS.¹

MN DIA - The Minnesota Distributed Energy Resource Interconnection Agreement. See MN DIP Section 1.1.5 for when the Uniform Statewide Contract or MN DIA applies.

MN DIP – The Minnesota Distributed Energy Resource Interconnection Process. The statewide interconnection standards.

MN Technical Requirements or Minnesota Technical Requirements – The term including all of the DER technical interconnection requirement documents for the state of Minnesota; including: 1) Attachment 2 Distributed Generation Interconnection Requirements established in the Commission’s September 28, 2004 Order in E-999/CI-01-1023) until superseded and upon Commission approval of updated Minnesota DER Technical Interconnection and Interoperability Requirements in E-999/CI-16-521 (anticipated February 2019.)

¹ A Material Modification shall include, but may not be limited to, a modification from the approved Interconnection Application that: (1) changes the physical location of the point of common coupling; such that it is likely to have an impact on technical review; (2) increases the nameplate rating or output characteristics of the Distributed Energy Resource; (3) changes or replaces generating equipment, such as generator(s), inverter(s), transformers, relaying, controls, etc., and substitutes equipment that is not like-kind substitution in certification, size, ratings, impedances, efficiencies or capabilities of the equipment; (4) changes transformer connection(s) or grounding; and/or (5) changes to a certified inverter with different specifications or different inverter control settings or configuration. A Material Modification shall not include a modification from the approved Interconnection Application that: (1) changes the ownership of a Distributed Energy Resource; (2) changes the address of the Distributed Energy Resource, so long as the physical point of common coupling remains the same; (3) changes or replaces generating equipment such as generator(s), inverter(s), solar panel(s), transformers, relaying, controls, etc. and substitutes equipment that is like-kind substitution in certification, size, ratings, impedances, efficiencies or capabilities of the equipment; and/or (4) increases the DC/AC ratio but does not increase the maximum AC output capability of the Distributed Energy Resource.

(Continued on Sheet No. 10-277)

By: Christopher B. Clark

Effective Date: 05-09-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-18-714

Order Date: 05-09-19

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**MINNESOTA DISTRIBUTED ENERGY RESOURCE
INTERCONNECT AGREEMENT (MN DIA)**

Section No. 10
Original Sheet No. 277

Nameplate Rating: nominal voltage (V), current (A), maximum active power (kWac), apparent power (kVA), and reactive power (kvar) at which a DER is capable of sustained operation. For a Local EPS with multiple DER units, the aggregate nameplate rating is equal to the sum of all DERs nameplate rating in the Local EPS, not including aggregate capacity limiting mechanisms such as coincidence factors, plant controller limits, etc. that may be applicable for specific cases. (Aggregate Nameplate Rating). The nameplate ratings referenced in the MN DIP are alternating current nameplate DER ratings See MN DIP Section 5.14 on Capacity of the Distributed Energy Resource.

Network Upgrades – Additions, modifications, and upgrades to the Transmission System required at or beyond the point at which the DER interconnects with the Area EPS Operator’s System to accommodate the interconnection with the DER to the Area EPS Operator’s System. Network Upgrades do not include Distribution Upgrades.

Notice of Dispute – The disputing Party shall provide the other Party this written notice containing the relevant known facts pertaining to the dispute, the specific dispute and the relief sought, and express notice by the disputing Party that it is invoking the procedures under MN DIP 5.3.

Operating Requirements – Any operating and technical requirements that may be applicable due to the Transmission Provider’s technical requirements or Minnesota Technical Requirements, including those set forth in this Agreement.

Party or Parties – The Area EPS Operator and the Interconnection Customer.

Point of Common Coupling (PCC) – The point where the Interconnection Facilities connect with the Area EPS Operator’s Distribution System. See figure 1. Equivalent, in most cases, to “service point” as specified by the Area EPS Operator and described in the National Electrical Code and the National Electrical Safety Code.

(Continued on Sheet No. 10-278)

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

MINNESOTA DISTRIBUTED ENERGY RESOURCE
 INTERCONNECT AGREEMENT (MN DIA)

Section No. 10
 Original Sheet No. 278

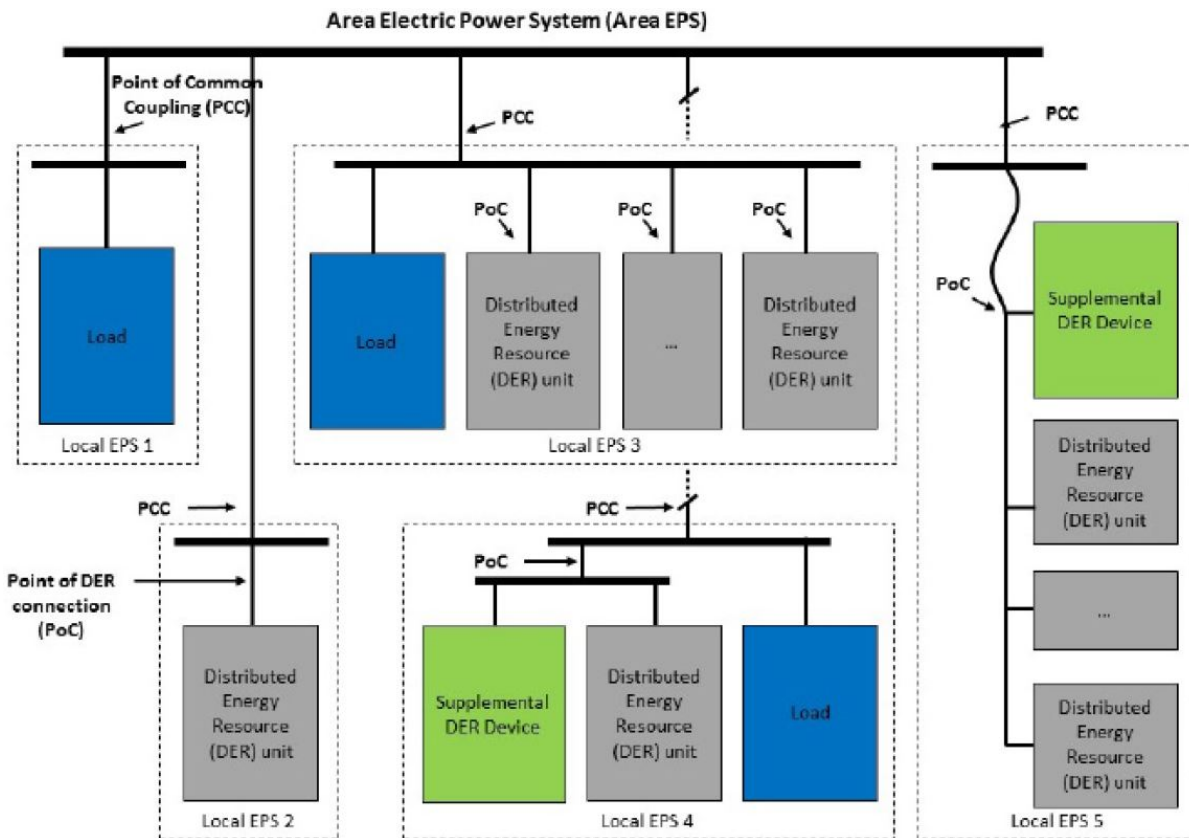


Figure 1: Point of Common Coupling and Point of DER Connection
 (Source: IEEE 1547)

Point of DER Connection (PoC) – When identified as the Reference Point of Applicability, the point where an individual DER is electrically connected in a Local EPS and meets the requirements of this standard exclusive of any load present in the respective part of the Local EPS (e.g., terminals of the inverter when no supplemental DER device is required.) For DER Unit(s) that are not self-sufficient to meet the requirements without (a) supplemental DER device(s), the point of DER connection is the point where the requirements of this standard are met by DER in conjunction with (a) supplemental DER device(s) exclusive of any load present in the respective part of the Local EPS.

Queue Position – The order of a valid Interconnection Application, relative to all other pending valid Interconnection Applications, that is established based upon the date- and time- of receipt of the complete Interconnection Application as described in MN DIP sections 1.5.2 and 1.8.

(Continued on Sheet No. 10-279)

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**MINNESOTA DISTRIBUTED ENERGY RESOURCE
INTERCONNECT AGREEMENT (MN DIA)**

Section No. 10
Original Sheet No. 279

Reasonable Efforts – With respect to an action required to be attempted or taken by a Party under these procedures, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

Reference Point of Applicability – The location, either the Point of Common Coupling or the Point of DER Connection, where the interconnection and interoperability performance requirements specified in IEEE 1547 apply. With mutual agreement, the Area EPS Operator and Customer may determine a point between the Point of Common Coupling and Point of DER Connection. See Minnesota DER Technical Interconnection and Interoperability Requirements for more information.

Simplified Process – The procedure for evaluating an Interconnection Application for a certified inverter-based DER no larger than 20 kW that uses the screens described in MN DIP section 3.2. The Simplified process includes simplified procedures. MN DIP Attachment 2 Simplified Application Form includes a brief set of terms and conditions and the option for an Interconnection Agreement described in MN DIP 1.1.5. See MN DIP Section 2 Simplified Process.

Study Process – The procedure for evaluating an Interconnection Application that includes the MN DIP Section 4 scoping meeting, system impact study, and facilities study.

Tariff – The Area EPS Operator's Tariff filed in compliance with the Minnesota Distributed Energy Resource Interconnection Procedures (MN DIP) and approved by the Minnesota Public Utilities Commission (MPUC or Commission).

Transmission Owner – The entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System relevant to the Interconnection.

Transmission Provider – The entity (or its designated agent) that owns, leases, controls, or operates transmission facilities used for the transmission of electricity. The term Transmission Provider includes the Transmission Owner when the Transmission Owner is separate from the Transmission Provider. The Transmission Provider may include the Independent System Operator or Regional Transmission Operator.

Transmission System – The facilities owned, leased, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service. See the Commission's July 26, 2000 Order Adopting Boundary Guidelines for Distinguishing Transmission from Generation and Distribution Assets in Docket No. E-999/CI-99/1261.

Uniform Statewide Contract – State of Minnesota's standard, uniform contract that must be applied to all qualifying new and existing interconnections between a utility and DER having capacity less than 40 kilowatts if interconnecting with a cooperative or municipal utility and 1,000 kilowatts if interconnecting with a public utility. (Minn. Rules 7835.9910)

Upgrades – The required additions and modifications to the Area EPS Operator's Transmission or Distribution System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

(Continued on Sheet No. 10-280)

Interconnection Customer Application No: Case No - [05766897](#)
Address of DER System: [2801 Red Wing Blvd., Hastings Minnesota 55033](#)

**Minnesota Distributed Energy Resource
Interconnection Agreement (MN DIA)**

**Attachment 2: Description and Costs of the Distributed Energy Resource,
Interconnection Facilities, and Metering Equipment (as authorized by Tariff Sheet 10-280)**

Equipment, including the Distributed Energy Resource, Interconnection Facilities, and metering equipment shall be itemized and identified as being owned by the Interconnection Customer or the Area EPS Operator. The Area EPS Operator will provide a good faith estimate itemized cost, including administrative overheads, of its Interconnection Facilities and metering equipment, and a good faith estimate itemized cost of the annual operation and maintenance expenses associated with its Interconnection Facilities and metering equipment. The Area EPS shall inform the Interconnection Customer of the option to either pay the metering costs upfront or through a monthly metering fee and provide the customer a copy of the tariff with the metering fee pursuant to MN DIP 5.4.

The DER (as defined in Glossary to the MN DIA) is owned by the Interconnection Customer.

The Interconnection Facilities (as defined in Glossary to the MN DIA) consist of all facilities and equipment between the DER and the Point of Common Coupling and are composed of the Area EPS Operator's Interconnection Facilities and the Interconnection Customers' Interconnection Facilities. Except as specified below, the Interconnection Customer's Interconnection Facilities owned by the Interconnection Customer consist of: supplemental DER devices, inverters, and associated wiring and cables up to the Point of DER Connection; and the Area EPS Operator Interconnection Facilities owned by the Area EPS Operator include sole use facilities such as, line extensions, controls, relays, switches, breakers, transformers, and any recloser facility dedicated for use by the DER. This definition does not include other equipment owned by the Area EPS Operator such as Distribution Upgrades or Network Upgrades.

Metering Equipment

All metering equipment is owned by the Area EPS Operator.

MN DIP 5.4 states:

Any metering requirements necessitated by the use of the DER shall be installed at the Interconnection Customer's expense. The Interconnection Customer is responsible for replacement meter costs not covered in the Interconnection Customer's general customer charge. The Area EPS Operator may charge Interconnection Customers an ongoing metering-related charge for an estimate of ongoing metering-related costs specifically demonstrated and approved in tariff regardless of the choice of meter payment. The Area EPS Operator shall offer the Interconnection Customer the following payment options:



5.4.1 Pay upfront the cost of metering requirements for the DER. Any maintenance or replacement costs may be billed separately to the Interconnection Customer after these costs are incurred.

5.4.2 Pay a tariffed monthly charge for the actual, DER-related meter and metering-related costs. If no tariffed monthly charge is an exact match, then the closest applicable tariffed monthly charge shall apply; unless metering requirements are so different that individual case basis pricing should apply.

If a closely applicable metering and/or telemetry charge is identified in the Section 10 tariff of the Area EPS Operator, that charge shall apply and the then-current charge in the Section 10 tariff shall apply as the tariff is revised or changed. If prior to having any such applicable charge in the Section 10 tariff there is a closely applicable charge in the Section 9 tariff of the Area EPS Operator, then that charge shall apply and shall change as that Section 9 tariff is revised or changed. The Section 9 tariff charge will no longer be applicable once there is a closely applicable Section 10 or other tariff charge that applies. If the closely applicable metering and/or telemetry charge is identified in any tariff of the Area EPS Operator but not in the Section 10 or Section 9 tariff, then that other tariff charge shall apply. If there is a closely applicable tariffed monthly metering fee in the current tariff as of the time of the signing of the MN DIA, it is attached to this Attachment 2.

As of the time of signing this MN DIA, the following upfront metering and/or telemetry charges apply: \$0.

Bundled monthly metering service cost:

| Meter Description | Customer Class | Bundled Monthly Metering Service (upfront and ancillary metering costs included) |
|---|------------------|--|
| Single Phase, under 100 kW | Residential | \$3.40 |
| | Small Commercial | \$4.60 |
| | Large Commercial | \$6.10 |
| Three Phase, under 100 kW | Residential | \$4.20 |
| | Small Commercial | \$5.40 |
| | Large Commercial | \$6.90 |
| 100kW to 249.99kW Self-Contained Production Meter (not requiring real-time data) | All | \$6.90 |
| 100kW to 249.99kW – Three Phase, Instrument-rated Production Meter (not requiring real-time data) | All | \$12.00 |
| 250kW to 10 MW – Three Phase, Instrument-rated Production Meter (requiring real-time data) | All | \$72.00* |

| Meter Description | Upfront Metering Price (customer is responsible for maintenance and replacement costs) | Monthly Ancillary Metering Service (metering costs are pre-paid) |
|-------------------|--|---|
| Under 250kW | \$0 | See Sec.10 of Tariff for more information regarding bundled pricing |
| 250kW to 1MW | \$2,740 | \$44.00* |

Please reference the Uniform Statewide Contract and Section 10 Tariff for more information regarding up-front/bundled meter pricing along with the monthly ancillary meter service pricing.

The monthly charge may changeover time in line with the most closely applicable tariffed metering rate, provided that the metering here is not so different from the tariffed description. If the metering is so different from the tariffed description, then individual case base pricing shall apply.

*Includes monthly mobile network costs and annual maintenance



MN DIA Attachment 2, Page 3

Good Faith Estimated Itemized Cost

Pursuant to MN DIA 4.1.1, the following are good faith estimated itemized costs, including overheads, for the purchase and construction of the Area EPS Interconnection Facilities, but not including metering that is addressed above: **\$0.00.**

The purchase and construction of the Area EPS Interconnection Facilities includes the following:

- Conductor and Pole Modifications:
 - NA
- Switches and Fuses
 - NA
- Distribution Transformers
 - NA

Total of good faith estimate of upfront metering (if applicable) and Area EPS Interconnection Facilities to be charged to Interconnection Customer: \$0.00.

For applications subject to the Xcel Energy Cost Sharing Program, which applies to applications under 40 kW AC deemed complete after January 1, 2023: The Cost Sharing Fund has allocated \$0.00 for the above work. This leaves the Interconnection Customer's up-front share of the above work as \$0.00.

Total actual costs may be markedly different from the above good faith estimated costs.

The Interconnection Customer is responsible for payment of the actual costs not covered by the Cost Sharing Fund in full upon signing the MN DIA.

The amounts in this Attachment 2 are in addition to the amounts reflected in Attachment 6. One or more SOWs or bills may be issued to reflect payments due under Attachments 2 and 6.



MN DIA Attachment 3, Page 1

**Attachment 3: One-line Diagram Depicting the Distributed Energy Resource,
Interconnection Facilities, Metering Equipment, and Upgrades**

| PROJECT DESCRIPTION | |
|---------------------|---------------------------------------|
| SYSTEM SIZE (DC) | 186.24 kW |
| SYSTEM SIZE (AC) | 125.00 kW |
| DC/AC RATIO | 1.490 |
| AZIMUTH | 151.63° |
| TILT | 10° |
| MODULE TYPE | Q.CELL (485W) Q.PEAK DUO XL-G10.3/BFG |
| MODULE COUNT | 384 |
| INVERTER TYPE | SUNNY TRIPOWER CORE1 62-US-41 (SMA) |
| INVERTER POWER (kW) | 62.5kW PER |
| RACKING | ROOF MOUNT |
| MONITORING | SMA |
| PROJECT AREA | ~9,600 FT ² |
| MIN./MAX. TEMP | -28°C / 32°C |

OTHER NOTES
CASE #: 05766897

NO POSITION, DISTANCE, OR CLEARANCE ISSUES WITH OVERHEAD ELECTRIC SERVICE LINES OR OTHER UTILITIES IN RELATION TO THE PV PANELS

24/7 UNESCORTED ACCESS VIA LOXBOX FOR THE UTILITY METERS AND UTILITY AC DISCONNECT. PRODUCTION METER WILL HAVE 24/7 UNESCORTED KEYLESS ACCESS

| REVISIONS | | | | |
|-----------|---------------------|----|-------|------------|
| # | DESCRIPTION | BY | CHK'D | DATE |
| 0 | INTERCONNECTION SET | JL | MH | 03/08/2024 |
| 1 | INTERCONNECTION SET | JL | MH | 04/24/2024 |
| 2 | INTERCONNECTION SET | JL | MH | 08/14/2024 |

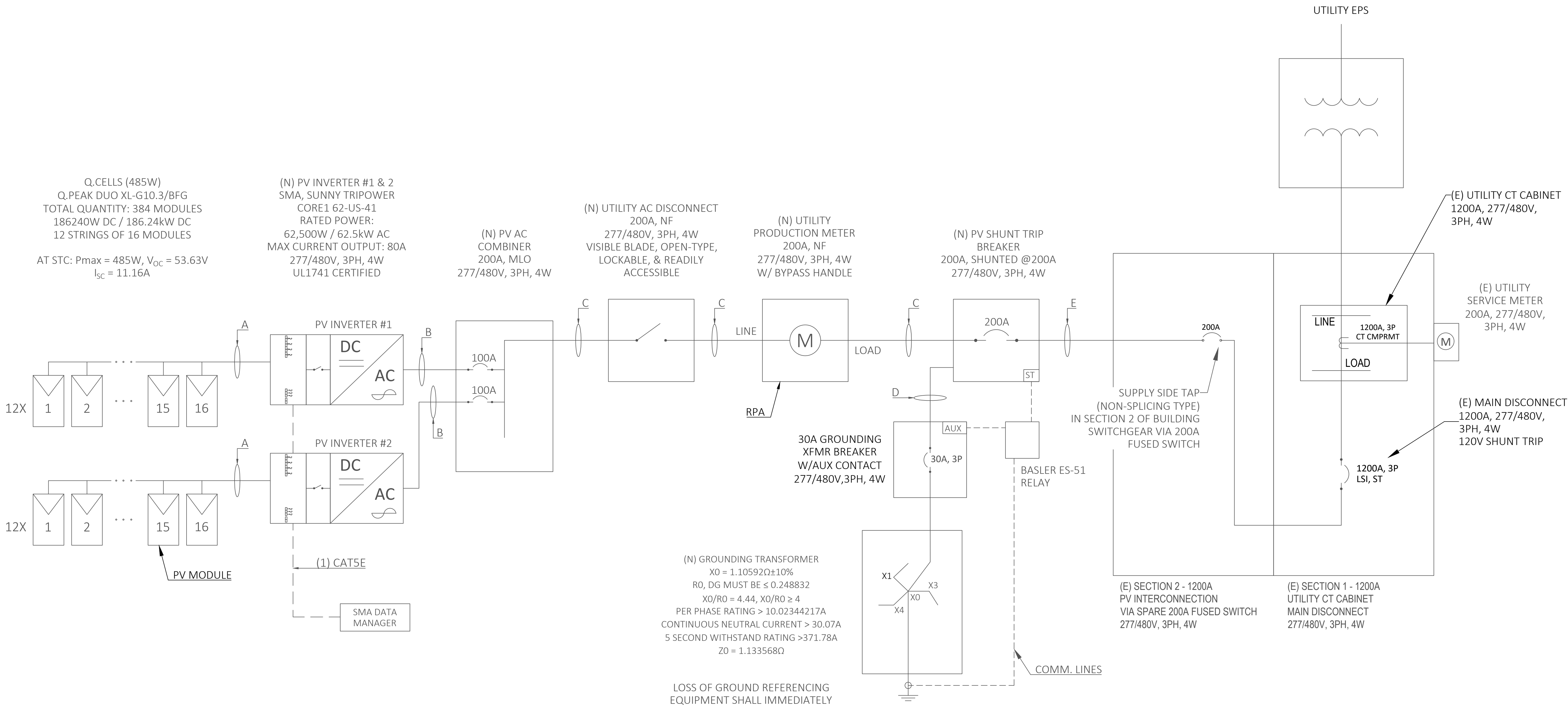
DRAWN BY :
JORIDA LATIFI

PROJECT NAME & JOB #: 1939
APEX FACILITY SOLUTIONS

SHEET DESCRIPTION :
ONE LINE DIAGRAM

SPACE FOR PE STAMP :

SHEET :
PV-2.0



| CABLE SCHEDULE | | | | | | | |
|----------------|-----|---------------|----------------|--------------------|------------------------------|--------------------|----------|
| CABLE ID | QTY | PARALELL RUNS | CONDUCTOR SIZE | CONDUCTOR MATERIAL | TYPE | RACEWAY TYPE | VOLTAGE |
| A | 24 | 1 | #10 AWG | CU | RHW-2, 2000V PV WIRE | 2" EMT | 1000V dc |
| | 1 | | #6 AWG | CU | THHN/THWN-2 (GND) | | |
| B | 4 | 1 | #1 AWG | ALU | XHHW-2 (BRN, ORG, YLLW, GRY) | 1 1/2" EMT | 480/277V |
| | 1 | | #8 AWG | CU | THHN/THWN-2 (GND) | | |
| C | 4 | 1 | 250 KCMIL | ALU | XHHW-2 (BRN, ORG, YLLW, GRY) | 2 1/2" EMT | 480/277V |
| | 1 | | #6 AWG | CU | THHN/THWN-2 (GND) | | |
| D | 3 | 1 | #8 AWG | CU | THHN/THWN-2 (BRN, ORG, YLLW) | 1 1/2" EMT | 480/277V |
| | 1 | | #2/0 AWG | CU | THHN/THWN-2 (GRY) | | |
| | 1 | | #6 AWG | CU | THHN/THWN-2 (GND) | | |
| E | 4 | 1 | 250 KCMIL | ALU | XHHW-2 (BRN, ORG, YLLW, GRY) | 2 1/2" SCHD 80 PVC | 480/277V |
| | 1 | | #4 AWG | CU | THHN/THWN-2 (GND) | | |

| DISTANCES BETWEEN EQUIPMENT | | |
|-----------------------------|--------------------------|----------|
| FROM | TO | DISTANCE |
| MODULES | INVERTER | MAX 160' |
| INVERTER | PV AC COMBINER | 130'-0" |
| PV AC COMBINER | UTILITY PV AC DISCONNECT | 1'-0" |
| UTILITY PV AC DISCONNECT | UTILITY PRODUCTION METER | 1'-0" |
| UTILITY PRODUCTION METER | GROUNDING TRANSFORMER | 1'-0" |
| GROUNDING TRANSFORMER | PV SHUNT TRIP BRAKER | 1'-0" |
| PV SHUNT TRIP BRAKER | UTILITY SERVICE METER | 80'-0" |
| UTILITY PRODUCTION METER | UTILITY SERVICE METER | 84'-0" |

- NOTES :**
- INVERTERS ARE UL1741-SB CERTIFIED
 - PV MODULES ARE UL1703 CERTIFIED
 - PV SYSTEM DESIGN MEETS UL3741
 - DESIGN SHALL MEET NEC 2023
 - SECONDARY INTERCONNECTION
 - THE UTILITY PRODUCTION METER AND UTILITY AC DISCONNECT WILL BE TOGETHER IN A READILY ACCESSIBLE LOCATION WITHIN 10' OF EACH OTHER
 - PRODUCTION METER AND UTILITY AC DISCONNECT WILL NOT BE WITHIN 10' OF UTILITY SERVICE METER AS UTILITY SERVICE METER IS LOCATED INSIDE ELECTRICAL ROOM. LOCKBOX ACCESS HAS ALREADY BEEN PROVIDED FOR XCEL ENERGY
 - EXISTING UTILITY SERVICE METER AND OTHER XCEL METERS LOCATED ON INTERIOR OF ELECTRICAL ARE ACCESSIBLE VIA EXISTING LOCKBOX
 - PLACARDS WILL BE PLACED AT UTILITY SERVICE METER AND UTILITY AC DISCONNECT AT MINIMUM, SHOWING LOCATIONS OF ELECTRICAL EQUIPMENT
 - LOSS OF GROUND REFERENCING EQUIPMENT SHALL IMMEDIATELY TRIP THE DER SYSTEM



Attachment 4: Milestones

The Milestone in line (1) below may be a calendar date. All other dates in this Attachment 4 may be number of Business Days from the calendar date in line (1) or from the completion of a different Milestone described in a specified line number. Similarly, the anticipated In-Service Date may be based on the number of Business Days from the completion of a specified line number.

In-Service Date: Upon successful completion of line (6).

Critical milestones and responsibility as agreed to by the Parties:

| Line | Milestone/Anticipated Date | Responsible Party |
|------|--|--------------------------|
| (1) | Fully executed MN DIA (last signature date below) | Both |
| (2) | System installation complete, as well as final electrical inspection and proof of insurance documentation uploaded into the application portal. Provide notification to MNDER@xcelenergy.com of completion of this step. | Interconnection Customer |
| (3) | Upon completion of lines (1) and (2), Interconnection customer will receive confirmation of meter order and may schedule energization/witness testing for open slot at least 7 Business Days prior to desired In-Service Date (ISD). Construction must be completed prior to scheduling this date. | Interconnection Customer |
| (4) | If DER does not pass the energization/witness testing, Interconnection Customer must schedule another testing. Repeat this line until the DER passes testing. | Interconnection Customer |
| (5) | Interconnection Customer must, within 10 Business Days of successful testing, complete and resolve punch list items identified during energization/witness testing. Provide notification to MNDER@xcelenergy.com of completion of this step. | Interconnection Customer |
| (6) | Provide PTO authorization within 5 Business Days after BOTH of these are achieved: 1.) timely completion of line (5); and, 2.) successful testing | Area EPS Operator |

Upon notice from the Area EPS Operator to the Interconnection Customer, the above required email notifications to MNDER@xcelenergy.com will not be needed. This notice will be provided after the online portal for receiving documents has been enhanced to automatically provide appropriate notification.

Agreed to by:

For Interconnection Customer: [[CertifiedSignature_1_1]]

For Area EPS Operator: [[CertifiedSignature_2]]

Date: [[CertifiedDate_1_1]]

Date: [[CertifiedDate_2]]

For Transmission Owner (if applicable) Date:



**Interconnection Customer Application No: Case No - [05766897](#)
Address of DER System: [2801 Red Wing Blvd., Hastings Minnesota 55033](#)**

**Minnesota Distributed Energy Resource
Interconnection Agreement (MN DIA)**

**Attachment 5: Additional Operating and Maintenance Requirements for the Area EPS
Operator's Distribution System and Affected Systems Needed to Support the Interconnection
Customer's Needs (as authorized by Tariff Sheet 10-283)**

The Area EPS Operator shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Area EPS Operator's Distribution System. Additional operating and maintenance requirements for an Affected System needed to support the Interconnection Customer's needs may be addressed in a separate agreement as described in Article 5.3.

These Operating and Maintenance Requirements (Attachment 5), in this Attachment to the Minnesota Distributed Energy Resource Interconnection Agreement (MN DIA) (as adopted in the Area EPS Operator tariff), provide the specific operating information and requirements for, and facilitates the operation of, the Interconnection Customer's Distributed Energy Resource (DER). The Interconnection Customer must operate the DER in accordance with the Minnesota Technical Requirements, this Attachment 5, as well as all provisions of applicable Area EPS Operator Minnesota tariffs. Unless otherwise defined in this Attachment, capitalized terms herein shall have the meaning provided such terms in the MN DIA. Consistent with the MPUC's January 22, 2020 order in Docket No. E-999/CI-16-521, the Minnesota Technical Requirements comprise both the TIIR and TSM which first become effective on July 1, 2020. After this effective date, the current versions of the TIIR and the Area EPS Operator's TSM can be accessed at the following link: https://www.xcelenergy.com/working_with_us/how_to_interconnect. In the event that this link changes over time or no longer points to the then-current TIIR or TSM, the Interconnection Customer can contact the Area EPS Operator for instruction on how to access the then-current versions of these documents.

Nothing in this Attachment is intended to or shall be construed as limiting Area EPS Operator's rights under the Area EPS Operator Minnesota tariffs. In the event of a conflict between this Operating and Maintenance Agreement and any law, regulation and/or the Area EPS Operator Minnesota tariff, the law, regulation or Area EPS Operator Minnesota tariff shall control, and the conflicting Operating and Maintenance Agreement provision shall have no effect. In the event of such a conflict, the remaining terms of this Operating and Maintenance Agreement shall remain in effect.

This Operating and Maintenance Agreement may be reviewed and amended by the Parties periodically to allow the operation of the DER to change to meet the needs of both Area EPS Operator and Interconnection Customer, provided that change does not negatively affect the operation of the distribution or transmission system of Area EPS Operator. In addition, the Parties may amend this Operating and Maintenance Agreement to reflect operating changes required by regulatory authorities having jurisdiction over the matters governed by this

Attachment, such as changes required by the Minnesota Public Utility Commission, the Federal Energy Regulatory Commission or the Midwest Independent System Operator.

If the power factor, or any other provision of this Attachment 5, at any time is in the sole determination of the Area EPS Operator no longer consistent with the provisioning of adequate quality of electricity for retail customers of the Area EPS Operator, or for other reliability or safety considerations or other reasons addressed in Sections 2 and 3 below, then this shall be considered to be an Emergency Condition (as described in MN DIA). If the Interconnection Customer has not countersigned an amendment to this Amendment 5 tendered to it by the Area EPS Operator to address and resolve this Emergency Condition, the Area EPS Operator shall be able to take all actions to address this Emergency Condition as set forth in the MN DIA. Any such amendment may include reasonable requirements to show proof that applicable changes have been made to the DER.

This Attachment sets forth the technical terms pursuant to which Interconnection Customer may export energy to Area EPS Operator from the DER. This Attachment does not provide for the amount, metering, billing and accounting for the export of energy from the DER, nor does it constitute Area EPS Operator's agreement to purchase or pay for any such energy. Any such arrangements will be provided for in a separate written agreement.

1.0 Definitions

- 1.1 "Distributed Energy Resources" (DERs) include all sources, including energy storage systems. All sources interconnected in parallel with Xcel Energy's system require an interconnection review.
- 1.2 "Engineering Study" means the system impact study or facilities study performed by Area EPS Operator as part of the interconnection process conducted pursuant to the MN DIP.
- 1.3 "Area EPS Operator Control Center Contact" is as defined in Section 9.2.
- 1.4 "Interconnection Customer Control Center Contact" is as defined in Section 9.3.
- 1.5 Unless specifically defined otherwise, all measurements and performance requirements will be measured at the Reference Point of Applicability (RPA), as defined by IEEE 1547.

2.0 Power Factor Requirements

The power factor of the DER and connected load shall be as follows. Inverter based interconnections shall, at minimum, be designed to be capable of operating fully at a power factor range of 90% leading to 90% lagging at the inverter terminals. The specific power factor for this DER is specified in par. 2.1.1 below.

2.1 Normal operation:

- 2.1.1 Interconnection Customer will operate the DER as an inverter-based DER at a power factor as identified by the Engineering Study to mitigate voltage or power quality issues

resulting from the interconnection of the DER. Operation outside the specified power factor range is not allowed at any time without permission by Area EPS Operator. It is the responsibility of Interconnection Customer and not Area EPS Operator to assure that all equipment is sized properly so as to not curtail real power production if that is an objective of the Interconnection Customer.

A. If Interconnection Customer is operating the DER at a fixed power factor, it shall be power factor 0.98 (leading). The use of the term “leading” means the DER is absorbing reactive power. The use of the term “lagging” means the DER is injecting reactive power. This power factor is specified at the reference point of applicability (RPA). This power factor is subject to change over time where in the judgment of the Area EPS Operator a change is needed in order to maintain appropriate quality of electricity to the retail customers of the Area EPS Operator and for reliability and safety issues as more distributed energy resources are added to a feeder, feeders are reconfigured, as load changes on a feeder, or for other reasons. The possible changes to the power factor are mentioned here to help set expectations that changes to this should be expected over time. The power factor shall be changed upon notice by the Area EPS Operator to the Interconnection Customer.

B. If Interconnection Customer is operating the DER using a Smart Inverter, the dynamic power factor shall be set in Volt-VAR Mode using the following parameters. These parameters are described in the Xcel Energy MN Standard URP Settings and are defined by IEEE 1547-2018.

| | | |
|----------------|-------|----------|
| QV_CURVE_V1-SS | 0.92 | V p.u. |
| QV_CURVE_Q1-SS | 0.44 | Var p.u. |
| QV_CURVE_V2-SS | 0.98 | V p.u. |
| QV_CURVE_Q2-SS | 0.0 | Var p.u. |
| QV_CURVE_V3-SS | 1.02 | V p.u. |
| QV_CURVE_Q3-SS | 0.0 | Var p.u. |
| QV_CURVE_V4-SS | 1.08 | V p.u. |
| QV_CURVE_Q4-SS | -0.44 | Var p.u. |

These parameters are specified at the reference point of applicability (RPA). These parameters are subject to change over time where in the judgment of the Area EPS Operator a change is needed in order to maintain appropriate quality of electricity to the retail customers of the Area EPS Operator and for reliability and safety issues as more distributed energy resources are added to a feeder, feeders are reconfigured, as load changes on a feeder, or for other reasons. These possible changes to the parameters are mentioned here to help set expectations that changes to these parameters should be expected over time. These parameters shall be changed upon notice by the Area EPS Operator to the Interconnection Customer.

2.1.2 In the future, permanent Distribution System reconfigurations, capacity constraints, or other external factors may require that the DER be served from another system and/or may also require that the DER change power factor within the limits identified in Section 2.0 in order to prevent voltage rise or otherwise help to assure the safe and reliable operation of the Distribution System.

2.2 Contingency operation:

2.2.1 Temporary system conditions, such as overvoltage, may require the Area EPS Operator Control Center Contact, in accordance with good utility practice and avoiding, to the extent reasonably possible, a reduction in the DER output (in the sole discretion of Area EPS Operator), to direct the Interconnection Customer Control Center Contact to disconnect or partially curtail the output of the DER. In some cases, and in its sole discretion, Area EPS Operator may permit Interconnection Customer to partially operate or fully restore operation by temporarily applying different power factor settings.

3.0 Start-Up, Shut-Down, and Ramp Rates

3.1 The DER shall delay entry into service by an intentional minimum delay of 300 seconds when the Area EPS Operator Distribution System steady state voltage and frequency are within the ranges specified in Table 4 of IEEE 1547-2018. This entry into service requirement shall also apply for return to service after a DER trips.

3.2 The DER shall increase output of active power, or exchange of active power for energy storage, during entry into service as specified in Clause 4.10.3.c of IEEE 1547-2018 with an entry into service time period setting of 300 seconds. This entry into service requirement shall also apply for return to service after a DER trips.

3.3 In order to mitigate voltage or power quality issues, the Area EPS Operator reserves the right, based upon the Engineering Study or field experience, to specify modifications to the settings in Sections 3.1 and 3.2. Interconnection Customer may also be required to ensure that the inverters for the DER allow random or preprogrammed time delays between the startup of multiple inverters.

3.4 Additional optional ramp rate limitations (or inverter start-up limitations in a solar PV context):

Staggered start for all inverters on the project site.

4.0 Local and Remote Control

4.1 The Interconnection Customer shall ensure that at all times Area EPS Operator has access to a manually operated three-phase ganged lockable service disconnect switch. If transfer trip has been installed, then Interconnection Customer shall also ensure that Area EPS Operator has access to a breaker that can remotely control the DER from Area EPS Operator's systems. To the extent allowed by law, Area EPS Operator shall provide notice to the Interconnection Customer explaining the reason for the disconnection. If there is an emergency described in Section 4.1.1 or 4.1.2 below and prior notice is not reasonably possible, Area EPS Operator shall, after the fact, provide to the Interconnection Customer as to why the disconnection was required. Where reasonably possible, Area EPS Operator shall use commercially reasonable efforts to reconnect the DER in a timely manner. Interconnection Customer agrees and consents to Area EPS Operator's remote tripping or manual disconnection, as reasonably necessary under good utility practice, of the breaker for the DER including, but not limited to, in the following circumstances, as system conditions exceed parameters defined in any IEEE, NESC or ANSI standards:

4.1.1 Electric distribution or DER emergency

4.1.2 Public emergency

4.1.3 Abnormal feeder operation

4.1.4 Planned switching

4.1.5 Interconnection Customer's failure to promptly respond to and execute on Area EPS Operator's request to curtail the output of, or disconnect, the DER.

4.2 If the DER has tripped offline due to an interruption on the Distribution System, Interconnection Customer shall contact the Area EPS Operator "Electric Emergency/Outage" Number 800-895-1999 to report the unplanned interruption or outage.

5.0 Outages of the Distribution System

Upon the occurrence of an emergency outage(s) (defined as any unplanned interruption of Area EPS Operator's Distribution System), Interconnection Customer shall do the following:

5.1 If there is automation installed on the feeder, then the DER will be automatically disconnected from Area EPS Operator's electric Distribution System when not served by the normal source.

5.2 Area EPS Operator shall use commercially reasonable efforts to promptly restore the DER to service, consistent with good utility practice.

5.3 Unless otherwise directed by the Area EPS Operator, during a momentary (defined as an interruption of electric service to a customer with disruption less than or equal to 5 minutes) or extended Distribution System interruption, the Interconnection Customer shall follow the requirements of Section 3.0 when returning their system to service.

6.0 Interference

If the DER causes radio, television or electrical service interference to other customers, via the electric power system or interference with the operation of Area EPS Operator, the Interconnection Customer shall disconnect the DER. The Interconnection Customer shall either effect repairs to the DER or reimburse Area EPS Operator for the cost of any required Area EPS Operator modifications due to the interference.

7.0 Electric Distribution System Modification

7.1 At its sole discretion Area EPS Operator may modify its electric Distribution System. Area EPS Operator shall utilize good utility practice in performing these modifications, and provide notice consistent with good utility practices such as by providing telephone notice to the contact in Section 9 below.

7.2 Area EPS Operator shall include the DER in its permanent substation and distribution system reconfigurations and consider accommodations to Interconnection Customer consistent with good utility practice.

7.3 The DER must be designed and interconnected such that the reliability and the service quality for all customers of the electrical power system are not compromised. The Interconnection Customer is responsible for all costs associated with the installation, operation, and maintenance of the DER. The Interconnection Customer shall be responsible for any expenses, which may be incurred by Area EPS Operator as a result of any changes or modifications of the Interconnection Customer's DER. Any changes to the design or component parts of the DER shall follow the MN DIP process.

8.0 Contingency Configurations

8.1 During contingency operations, should voltage or power quality issues arise from operation of the DER, at the direction of the Area EPS Operator Control Center Contact the Interconnection Customer shall disconnect the DER if, in Area EPS Operator's sole discretion, it believes disconnection would facilitate maintaining compliance with ANSI- C84.1-2016 voltage requirements or other relevant industry standard.

8.2 During contingency operations, if the DER creates loading, overloading or protection issues, at the direction of the Area EPS Operator Control Center Contact the Interconnection Customer shall disconnect the DER if, in Area EPS Operator's sole discretion, it believes disconnection is consistent with good utility practice.

8.3 The Area EPS Operator may, in its sole discretion, disconnect the DER during abnormal system conditions or contingency operations. The DER shall not be reconnected to the system until the Area EPS Operator indicates the conditions requiring the DER to be disconnected are resolved.

8.4 DER shall cease operation for loss of DER ground referencing equipment, if applicable, or loss of any other required DER component related to the safe and reliable operation of the DER.

9.0 Telephone Contact Information for Operational Issues

9.1 Each Party shall contact each other for planned and emergency operational issues related to the DER, when reasonable. In order to permit Area EPS Operator and Interconnection Customer to take immediate action, Interconnection Customer and Area EPS Operator shall at all times provide to each other the contact information for emergency and planned outages, who shall be available twenty-four (24) hours a day, seven (7) days a week and be able to take action with respect to the operation of the DER and the Distribution System, respectively. In order to maintain expedient restoration of the system, please note that Xcel Energy may not be able to contact the Interconnection Customer during emergency outages. The Interconnection Customer should report Xcel Energy outages to Xcel Energy through the Electric Outage Call Center number listed below.

9.2 The contact information for Xcel Energy that is available to Interconnection Customer twenty (24) hours a day, seven (7) days a week to report Xcel Energy outages affecting the Interconnection Customer, and for updates on expected restoration of service during unplanned outages, is:

Electric Outage Call
Center (800) 895-1999

9.3 The contact information for Interconnection Customer's Control Center that is available to Xcel Energy twenty (24) hours a day, seven (7) days a week is:

[[SertifiLG 1 1]]

9.4 Each Party shall keep the other informed of their above-identified contact information in this Section 9. Notice of changes to this information shall be provided immediately pursuant to Article 13 of the MN DIA.

10.0 Right of Access

10.1 At all times, Area EPS Operator shall have access to the disconnect switch of the DER for any reasonable purpose in connection with: the performance of its obligations under the MN DIA (including this Operating and Maintenance Agreement); to meet its obligation to operate the Area EPS Operator system safely and reliably; to comply with law or regulation; or, to provide service to its customers.

10.2 At all times, the Interconnection Customer shall give Area EPS Operator access to Area EPS Operator's equipment and facilities located on the Interconnection Customer's premises when necessary for Area EPS Operator to: perform its obligations under the MN DIA (including this Operating and Maintenance Agreement); meet its obligation to operate the Area EPS Operator system safely and reliably; to comply with law or regulation; or, provide service to its customers.

10.3 Consistent with the above, in order to allow Xcel Energy to have reasonably safe access, the Interconnection Customer needs to build, maintain, or otherwise always have in place, all of the following: 1.) a road grade no steeper at any point than 12% on any private road at this site; 2.) a permanent drivable (road) surface associated with this site so that Xcel Energy on a 24 hour a day, seven days a week, basis can access its equipment, including but not limited to lines, poles, transformers, billing meters, underground facilities and other facilities, but excluding production meters. The drivable road surface also needs to include appropriate turn-around locations. The road and turn-around need to be reasonably sufficient to support the use of a 10 ton truck (loaded with transformers, poles, and crews) and hauling a heavily-loaded trailer. A violation of any of these provisions at any time shall be considered to be a violation of the Interconnection Agreement that allows Xcel Energy to disconnect the DER.

11.0 Routine Maintenance Requirements

11.1 Interconnection Customer shall maintain the system in good working order.

11.2 Interconnection Customer shall perform maintenance in accordance with manufacturer recommendations and intervals.

12.0 Generation Metering, Monitoring, and Control

12.1 When telemetry is required, the Interconnection Customer is financially responsible for the communications channel associated with Area EPS Operator's Remote Monitoring System. The communication channel shall comply with Area EPS Operator requirements and standards. If the communications cabinet and/or communication channel is provided by Area EPS Operator, the Interconnection Customer shall be responsible for operating and maintenance costs, and replacement of any failed parts or materials.

12.2 Interconnection Customer shall be responsible for costs associated with emergency repairs, scheduled repairs, or replacement of parts for the telemetry system.

12.3 Interconnection Customer shall be responsible for replacement costs for advanced metering equipment, such as an ION meter.

12.4 Interconnection Customer is responsible for assuring network equipment functions properly to facilitate communications between the Area EPS Operator communications cabinet and all meters on site. Any failure of Interconnection Customer provided equipment between the communication cabinet and meters shall be repaired or replaced by the Interconnection Customer within seven (7) calendar days of the first day of improper functioning of this equipment. This includes wiring, connectors, switches, panels, all other hardware, fiber or Ethernet, Remote Terminal Unit (RTU), 120 V power source, etc. To the extent this equipment is not working properly, there may be delayed payment for generation. Failure of the Interconnection Customer to repair the improperly working equipment within this seven (7) calendar day period may result in disconnection of the DER from Area EPS Operator's Distribution System, with permission to reconnect only granted after the situation is corrected.

13.0 Modifications to the DER

13.1 The Interconnection Customer shall notify Area EPS Operator, in writing of plans for any modifications to the DER interconnection equipment at least twenty (20) business days prior to undertaking such modification.

13.2 Modification or replacement with respect to any of the interconnection equipment, including all power conversion equipment, protective systems, DER control systems, the transfer switches/breakers, VT's & CT's, generating capacity and associated wiring shall be included in the notification to Area EPS Operator. Any such proposed modification shall also comply with any applicable requirement in the MN DIP or MN DIA.

13.3 The Interconnection Customer agrees not to commence installation of any modifications to the DER until Area EPS Operator has approved the modification, in writing.

13.4 Area EPS Operator shall have a minimum of five (5) business days and a maximum of ten (10) business days, to review and respond to the modification, after the receipt of the information required to review the modifications.

14.0 Special Facilities

14.1 Interconnection Customer may request underground facilities where Company standard construction is overhead facilities.

14.2 The Company will determine if the request will not adversely affect the reliability, operational integrity, or schedule of required work.

14.3 The Interconnection Customer shall be responsible for Operating, Maintenance and Replacement costs of the special facilities. In this context, the term "special facilities" means facilities which the Company builds or installs which differ from the Company's typical construction standards. For example, this would include the situation where the Interconnection Customer, for aesthetics, permitting, or any other reason, requests underground facilities even though from a technical perspective overhead facilities would be sufficient.

14.4 Perpetual easements will be granted Company at no cost to the Company whenever any portion of the underground Distribution System is located on private land. Said easements also will allow the Company access for inspection, maintenance, and repair of Company facilities.

15.0 Energy Storage Systems Only

15.1 The Energy Storage System application must include an approved MN DIP Exhibit B For Energy Storage and Declaration of Electric Storage Operation, as required by the Xcel Energy Technical Specification Manual (TSM), Section 10.4.

15.2 The Energy Storage System will operate according to a Configuration Compliant with Tariffs, as defined by the Xcel Energy TSM, Section 10.11, or any then-current version of the TSM.

15.3 To qualify for export, the Energy Storage System must be charged by 100% renewable energy. Any storage mixture of non-renewable energy disqualifies the system from exporting. If charging is not 100% renewable energy, then the Generation System may be used with non-export from the Energy Storage System to the grid.

15.4 System software or programming that can be modified such that the Energy Storage System would no longer be in compliance with this Operating Agreement must be inaccessible and/or password protected, with access restricted to manufacturer/developer/installer. This may include locks or other physical security or other means of securing the settings; or as mutually agreed upon on a case-by- case basis. Only the operational modes listed as enabled in this Operating Agreement are allowed unrestricted access.

15.5 Xcel Energy has the right to conduct inspections at any time to verify compliance if problems arise or indications of possible non-compliance with this Operating Agreement are present.

15.6 The magnitude of Inadvertent Export shall be less than the total Generation System facility nameplate rating (kW-gross) and the duration of export of power from the customer shall be less than 30 seconds for any single event.

15.7 Energy Storage Systems shall be subject to the same requirements as the Generation System, as defined by this agreement.

Interconnection Customer Application No: Case No - [05766897](#)
Address of DER System: [2801 Red Wing Blvd., Hastings Minnesota 55033](#)

**Minnesota Distributed Energy Resource
Interconnection Agreement (MN DIA)**

Attachment 6: Area EPS Operator's Description of Distribution and Network Upgrades and Good Faith Estimates of Upgrade Costs (as authorized by Tariff Sheet 10-284)

The Area EPS Operator shall describe Distribution and Network Upgrades and provide an itemized good faith estimate of costs, including administrative overheads, of these Upgrades and annual operation and maintenance expenses associated with such Upgrades. The Area EPS Operator shall functionalize Upgrade costs and annual expenses as either transmission or distribution related. Additional Distribution or Network Upgrades required for an Affected System may be addressed in a separate agreement as described in Article 5.3.

Description of Distribution and Network Upgrades

Pursuant to MN DIA 4.2 and 5.2, below are good faith estimated itemized costs, including overheads, for the purchase and construction of the Area EPS Distribution Upgrades and Network Upgrades. The good faith estimated costs are contingent upon all projects ahead in the Interconnection Queue moving forward as proposed. Any changes, cancellations, or modifications to the previous projects in the Interconnection Queue may require significant changes in scope and cost to be assessed under this MN DIA. In addition, a good faith cost estimate has been prepared for the Distribution and Substation costs required to accommodate this project. It is produced before any detailed engineering design has begun to provide a firmer estimate that incorporates as many project-specific factors as possible. The good faith estimate is generally based on typical conditions encountered on past construction projects, which may or may not be directly comparable. The engineering indicative cost estimate will only give a broad-based estimate of the possible costs that may be incurred during a potential construction project. Total actual costs may be markedly different from the good faith estimated costs. The Interconnection Customer is responsible for payment of the actual costs.

The following Distribution and Network Upgrades are needed:

Distribution Upgrades – Distribution Lines

None Required

- All new services shall be approved by local inspector prior to Xcel Energy scheduling energization.
- Refer to the Xcel Energy Standard for Electric Installation and Use.
- Easements are required by Xcel Energy to install any facilities on private property. The Customer/Developer is responsible to provide the easement descriptions as well as any costs to obtain the easements. All easements shall utilize Xcel Energy documents and be drafted and recorded by Xcel Energy. Provide 30' private easements for facilities not located along roadways, and 15' if adjacent to road right of way.

- Xcel Energy requires provisions for 24/7, unescorted, keyless access to all metering locations.

Distribution Upgrades – Substation

None required

- There are no substation upgrades required for this project. This is contingent upon all projects ahead in the Interconnection Queue moving forward as proposed. Projects may include other Solar Rewards Community projects as well as all other types of generation interconnection projects such as wind, hydro, or non-program PV. Any changes, cancellations, or modifications to the previous projects in the Interconnection Queue may require significant changes in scope and cost of your projects. Xcel Energy shall communicate any changes to those affected projects as they are identified.

Network Upgrades

None required

Pursuant to MN DIP 5.6.4.1, the Interconnection Customer shall provide reasonable adequate assurances of credit, including a letter of credit or personal guaranty of payment and performance from a creditworthy entity acceptable under the Area EPS Operator credit policy and procedures for the unpaid balance of the above upfront estimated amount and actual costs. The payments shall be as follows:

- A. At least one-third (1/3) of the above estimated upfront costs shall be due no later than when the Interconnection Customer signs the Interconnection Agreement.
- B. At least an additional one-third (1/3) of the above upfront estimated costs shall be due prior to initial energization of the Generation System with the Area EPS Operator.
- C. Remainder of upfront actual costs, incurred by Area EPS Operator, shall be due within 30 days from the date the bill is mailed by the Area EPS Operator after project completion.

The total of the above good faith estimate for Distribution and Network Upgrades to be charged to Interconnection Customer is \$0.

Good Faith Estimates – Annual Operation and Maintenance Costs for Distribution and Network Upgrades

Distribution Upgrades:
\$0.

Network Upgrades:\$0.

Total of above good faith estimated annual O&M costs as of date MN DIA is signed: \$0.

The amounts in this Attachment 6 are in addition to the amounts reflected in Attachment 2. One or more SOWs or bills may be issued to reflect payments due under Attachments 2 and 6.

UNIFORM STATEWIDE CONTRACT FOR COGENERATION AND SMALL POWER PRODUCTION FACILITIES

Customer Name: City of Hastings

Mailing Address: 2801 RED WING BLVD, HASTINGS Minnesota, 55033

Premise Address: 2801 Red Wing Blvd.

Telephone/Cell Number: 651-480-2350

Application #: [05766897](#)

Premise Number: 303426536

Please note the following operating requirements:

Interconnection Customer will operate the DER as an inverter-based DER at a power factor as identified by the Engineering Study to mitigate voltage or power quality issues resulting from the interconnection of the DER. Operation outside the specified power factor range is not allowed at any time without permission by Area EPS Operator. It is the responsibility of Interconnection Customer and not Area EPS Operator to assure that all equipment is sized properly so as to not curtail real power production if that is an objective of the Interconnection Customer.

A). If Interconnection Customer is operating the DER at a fixed power factor, it shall be power factor 0.98 (leading). The use of the term “leading” means the DER is absorbing reactive power. The use of the term “lagging” means the DER is injecting reactive power. This power factor is specified at the reference point of applicability (RPA). This power factor is subject to change over time where in the judgment of the Area EPS Operator a change is needed in order to maintain appropriate quality of electricity to the retail customers of the Area EPS Operator and for reliability and safety issues as more distributed energy resources are added to a feeder, feeders are reconfigured, as load changes on a feeder, or for other reasons. The possible changes to the power factor are mentioned here to help set expectations that changes to this should be expected over time. The power factor shall be changed upon notice by the Area EPS Operator to the Interconnection Customer.

B). If Interconnection Customer is operating the DER using a Smart Inverter, the dynamic power factor shall be set in Volt-VAR Mode using the following parameters. These parameters are described in the Xcel Energy MN Standard URP Settings and are defined by IEEE 1547-2018.

| | | |
|----------------|-------|----------|
| QV_CURVE_V1-SS | 0.92 | V p.u. |
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| QV_CURVE_V2-SS | 0.98 | V p.u. |
| QV_CURVE_Q2-SS | 0.0 | Var p.u. |
| QV_CURVE_V3-SS | 1.02 | V p.u. |
| QV_CURVE_Q3-SS | 0.0 | Var p.u. |
| QV_CURVE_V4-SS | 1.08 | V p.u. |
| QV_CURVE_Q4-SS | -0.44 | Var p.u. |

These parameters are specified at the reference point of applicability (RPA). These parameters are subject to change over time where in the judgment of the Area EPS Operator a change is needed in order to maintain appropriate quality of electricity to the retail customers of the Area EPS Operator and for reliability and safety issues as more distributed energy resources are added to a feeder, feeders are reconfigured, as load changes on a feeder, or for other reasons. These possible changes to the parameters are mentioned here to help set expectations that changes to these parameters should be expected over time. These parameters shall be changed upon notice by the Area EPS Operator to the Interconnection Customer.

For more information, please refer to the Technical Specifications Manual on Xcel Energy’s Interconnection webpage:
<https://mn.my.xcelenergy.com/s/renewable/developers/interconnection>.

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

TECHNICAL AND SPECIAL TERMS FOR

Section No. 9

COGENERATION AND SMALL POWER PRODUCTION

2nd Revised Sheet No. 1

CAPACITY. The capability to produce, transmit, or deliver electric energy, which is measured by the number of megawatts alternating current at the point of common coupling between a QF or NMF and a utility's electric system.

FIRM POWER. Firm power is energy delivered by a QF or NMF to the utility with at least 65% on peak capacity factor in the billing period. The capacity factor is based upon a QF's or NMF's maximum on peak metered capacity delivered to the utility during the billing period.

GENERATION SYSTEM. For an interconnection not subject to the MN DIP, the generation system is the interconnected generator(s), controls, relays, switches, breakers, transformers, inverters and associated wiring and cables, up to the Point of Common Coupling. For an interconnection subject to the MN DIP, this term shall mean Distributed Energy Resources as defined in the MN DIP.

INDIVIDUAL SYSTEM CAPACITY LIMITS.

1. Customers with a facility of 40-kilowatt AC capacity or more and participating in net metering and net billing may be required to limit the total generation capacity of individual distributed generation systems by either: a. for wind generation systems, limiting the total generation system capacity kilowatt alternating current to 120 percent of the customer's on-site maximum electric demand; or b. for solar photovoltaic and other distributed generation, limiting the total generation system annual energy production kilowatt hours alternating current to 120 percent of the customer's on-site annual electric energy consumption.

2. Limits under paragraph 1.(a) applicable to measuring on-site maximum electric demand must be based on standard 15-minute intervals, measured during the previous 12 calendar months. If a facility subject to the demand limits under paragraph 1.(a) has either less than 12 calendar months of actual electric usage or has no demand metering available, then the means of estimating annual demand or usage for purposes of applying these limits will be based on looking at information for similarly situated customers.

3. The total generation capacity of individual distributed generation systems is determined by the total capacity of all of the customer's systems which are on the same set of aggregated meters. On-site maximum electric demand and on-site annual electric energy consumption are determined by total demand or electric energy consumption associated with the same set of aggregated meters.

4. For wind generation systems, the Company will estimate customer demand use for purposes of calculating the 120 percent rule by determining a demand-billed customer's highest billed on-site kW demand in all bills issued during the most recent calendar year. For non-demand customers, the Company shall impute the equivalent peak demand level by first determining the customer's most recent on-site annual (12-month) billed kWh sales. Those kWh sales shall be divided by the product of an assumed 30% annual load factor and the number of actual hours in that year (either 8,760 hours in a standard year or 8,784 hours in a leap year). The resulting quotient will serve as the customer's estimated on site maximum electric demand.

5. For solar photovoltaic and other distributed generation systems, where 12 months of usage data is not available, the Company will estimate customer energy use for purposes of calculating the 120 percent rule by averaging four months of usage. If four months of usage is not available, the Company will apply the limits under paragraph 1.(a) based on looking at information for similarly situated customers.

Date Filed: 12-14-18

By: Christopher B. Clark

Effective Date: 05-09-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-18-714

Order Date: 05-09-19

Northern States Power Company, a Minnesota corporation

Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

TECHNICAL AND SPECIAL TERMS FOR

Section No. 9

COGENERATION AND SMALL POWER PRODUCTION

1st Revised Sheet No. 1.1

(Continued)

INTERCONNECTION COSTS. The reasonable costs of connection, switching, metering, transmission, distribution, safety provisions, and administrative costs incurred by the Company that are directly related to installing and maintaining the physical facilities necessary to permit interconnected operations with a qualifying facility. Costs are considered interconnection costs only to the extent that they exceeded the corresponding costs which the Company would have incurred if it had not engaged in interconnected operations, but instead generated from its own facilities or purchased from other sources an equivalent amount of electric energy or capacity. Costs are considered interconnection costs only to the extent that they exceed the costs utility would incur in selling electricity to the qualifying facility as a non-generating customer.

METERING CHARGE. The monthly metering charge recovers the cost and installation of the additional meter and the associated billing, operating, and maintenance expenses.

MN DIA. The Minnesota Distributed Energy Resource Interconnection Agreement. See Company Section 10 tariff.

MN DIP. The Minnesota Distributed Energy Resource Interconnection Process. See Company Section 10 tariff. The MN DIA shall be considered to be part of the MN DIP.

MN TECHNICAL REQUIREMENTS (OR MINNESOTA TECHNICAL REQUIREMENTS). These are as defined in the MN DIP, Attachment 1, Glossary of Terms, and also include all requirements in the Operating Agreement attached to the MN DIA.

NET INTERCONNECTION CHARGE. The net interconnection charge will be assessed on a non-refundable basis to recover the Company's reasonable costs of connection, switching, transmission, distribution, safety provisions, and administrative costs that are directly related to installing and maintaining the physical facilities necessary to permit interconnected operations with a QF or NMF in excess of the facilities and expenses recovered in the monthly metering charge.

NET METERED FACILITY (NMF). An electric generation facility constructed for the purpose of offsetting energy use through the use of renewable energy or high-efficiency distributed generation sources.

OFF PEAK PERIOD. The off peak period contains all other hours not included in the on peak period. Definition of on peak and off peak period is subject to change with change in Company's system operating characteristics.

ON PEAK PERIOD. The on peak period contains all hours between 9:00 a.m. and 9:00 p.m., Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday.

QUALIFYING FACILITY (QF). A qualifying facility is a cogeneration or small power production facility which satisfies the conditions in 18 Code of Federal Regulations, Part 292.

SMALL QUALIFYING FACILITY (SQF). A small qualifying facility is a qualifying facility with certified capacity of 100 kW AC or less.

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

EXCESS GENERATION-AVERAGE RETAIL UTILITY ENERGY SERVICE RATE CODE A50

Section No. 9
30th Revised No. 2

AVAILABILITY

This service corresponds to Minn. R. 7835.4012 and Minn. R. 7835.4013 (Average Retail Energy Rate) and to Paragraph 3.a of the Uniform Statewide Contract for Cogeneration and Small Power Production. Available to any qualifying facility (QF) of less than 40 kW AC capacity who receives non-time of day retail electric service from Company and offsets energy delivered by Company. The A50 Rate Code applies to the extent the energy delivered by the customer exceeds that supplied by the Company during the monthly billing period, and the rates below are for that net excess generation.

RATE

Metering charges are as set forth in the Section 10 tariff

Payment per kWh for Energy Delivered to Company in Excess of Energy Used

| | <u>Oct-May</u> | <u>Jun-Sep</u> |
|--|----------------|----------------|
| With Retail Non-Demand Metered Service | \$0.12159 | \$0.13149 |
| With Retail Demand Metered Service | \$0.07111 | \$0.08394 |

TERMS AND CONDITIONS OF SERVICE

1. Energy used by customer in excess of energy delivered by the QF at the same site during the same billing period shall be billed in accordance with the appropriate non-time of day retail electric rate.
2. For demand metered General Service customers, the entire kW demand supplied by the Company at the same site during the same billing period shall be billed to the customer according to the appropriate general service demand charge rate.
3. Interconnection charges will be assessed by the Company on an individual basis for all costs associated with addition to or modification of Company facilities to accommodate the QF. The net interconnection charge is the responsibility of the QF.
4. The voltage and phase of customer's generator must be consistent with existing service and approved by the Company.
5. The customer must comply with the MN Technical Requirements.

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**SALE TO COMPANY AFTER CUSTOMER SELF-USE
RATE CODE A51, A52**

Section No. 9
28th Revised Sheet No. 3

AVAILABILITY

This service corresponds to Minn. R. 7835.4012, .4014 (Simultaneous Purchase and Sale Billing Rate) and .4015 (Time-of-Day Purchase Rates) and to Paragraphs 3.b., 3.c., 4.a and 4.b of the Uniform Statewide Contract for Cogeneration and Small Power Production. Available to any qualifying facility (QF) customer of less than 1,000 kW AC capacity. The energy payment rates below apply to the energy which the customer exports to the Company after any self-use by the customer.

RATE

Metering charges are as set forth in the Section 10 tariff

Where the customer receives non-time of day retail electric service, the following Rate Code applies.

| | | |
|--|----------------|----------------|
| Payment Schedule for Energy Delivered to Company (A51) | <u>Oct-May</u> | <u>Jun-Sep</u> |
| Energy Payment per kWh | \$0.03031 | \$0.03213 |
| Capacity Payment for Firm Power per kWh | \$0.00176 | \$0.01252 |

Where the customer receives time of day retail electric service, the following Rate Code applies.

| | | |
|--|----------------|----------------|
| Payment Schedule for Energy Delivered to Company (A52) | <u>Oct-May</u> | <u>Jun-Sep</u> |
| On Peak Energy Payment per kWh | \$0.03821 | \$0.04484 |
| Off Peak Energy Payment per kWh | \$0.02613 | \$0.02525 |
| Capacity Payment for Firm Power per On Peak kWh | \$0.00506 | \$0.03589 |

DETERMINATION OF FIRM POWER

The customer will have supplied firm power if during the billing period an on peak capacity factor of at least 65% was achieved. The calculation of the on peak capacity factor will be as follows: the average on peak period metered capacity delivered to the Company for the on peak period of the billing period divided by the greatest 15 minute metered capacity delivered for the on peak period of the same billing period expressed in percent and rounded to the nearest whole percent. If the percent calculated is 65 or greater, capacity payment will be made. If the percent calculated is less than 65, capacity payment will not be made.

(Continued on Sheet No. 9-3.1)

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SALE TO COMPANY AFTER CUSTOMER SELF-USE

Section No. 9

RATE CODE A51, A52 (Continued)

1st Revised Sheet No. 3.1

TERMS AND CONDITIONS OF SERVICE

- 1. Electric service provided by Company to customer at the same site shall be billed in accordance with the retail rate applicable to the customer.
- 2. Interconnection charges will be assessed by the Company on an individual basis for all costs associated with addition to or modification of Company facilities to accommodate the customer. The net interconnection charge is the responsibility of the customer.
- 3. The voltage and phase of customer's generator must be consistent with existing service and approved by the Company.
- 4. The customer must comply with the MN Technical Requirements.
- 5. Individual System Capacity Limits apply.

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

MONTHLY NET METERING

Section No. 9

RATE CODE A53, A54

27th Revised Sheet No. 4

AVAILABILITY

This service corresponds to Minn. R. 7835.4012, .4014 (Simultaneous Purchase and Sale Billing Rate) and .4015 (Time-of-Day Purchase Rates) and to Paragraphs 3.b., 3.c., 4.a. and 4.b. of the Uniform Statewide Contract for Cogeneration and Small Power Production.

Available to any qualifying facility (QF) customer of less than 1,000 kW AC capacity. The energy payment rates below apply to the extent the energy delivered by the customer exceeds that supplied by the Company during the monthly billing period, and the rates below are for that net excess generation.

RATE

Metering charges are as set forth in the Section 10 tariff

Where the customer receives non-time of day retail electric service, the following Rate Code applies.

| | | |
|---|----------------|----------------|
| Payment Schedule for Energy Delivered to Company in Excess of Energy Used (A53) | <u>Oct-May</u> | <u>Jun-Sep</u> |
| Energy Payment per kWh | \$0.03031 | \$0.03213 |
| Capacity Payment for Firm Power per kWh | \$0.00176 | \$0.01252 |

Where the customer receives time of day retail electric service, the following Rate Code applies.

| | | |
|---|----------------|----------------|
| Payment Schedule for Energy Delivered to Company in Excess of Energy Used (A54) | <u>Oct-May</u> | <u>Jun-Sep</u> |
| On Peak Energy Payment per kWh | \$0.03821 | \$0.04484 |
| Off Peak Energy Payment per kWh | \$0.02613 | \$0.02525 |
| Capacity Payment for Firm Power per On Peak kWh | \$0.00506 | \$0.03589 |

DETERMINATION OF FIRM POWER

The customer will have supplied firm power if during the billing period an on peak capacity factor of at least 65% was achieved. The calculation of the on peak capacity factor will be as follows: the average on peak period metered capacity delivered to the Company for the on peak period of the billing period divided by the greatest 15 minute metered capacity delivered for the on peak period of the same billing period expressed in percent and rounded to the nearest whole percent. If the percent calculated is 65 or greater, capacity payment will be made. If the percent calculated is less than 65, capacity payment will not be made.

(Continued on Sheet No. 9-4.1)

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

MONTHLY NET METERING

Section No. 9

RATE CODE A53, A54 (Continued)

1st Revised Sheet No. 4.1

TERMS AND CONDITIONS OF SERVICE

1. Electric service provided by Company to customer in excess of energy delivered by the QF at the same site during the same billing period shall be billed in accordance with the retail rate applicable to customer.
2. For demand metered General Service customers, the entire kW demand supplied by the Company at the same site during the same billing period shall be billed to the customer according to the appropriate general service demand charge rate.
3. Interconnection charges will be assessed by the Company on an individual basis for all costs associated with addition to or modification of Company facilities to accommodate the customer. The net interconnection charge is the responsibility of the customer.
4. The voltage and phase of customer's generator must be consistent with existing service and approved by the Company.
5. The customer must comply with the MN Technical Requirements.
6. Individual System Capacity Limits apply.

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MINNESOTA ELECTIC RATE BOOK - MPUC NO. 2

ANNUAL NET METERING (KWH BANKING OPTION)

Section No. 9

RATE CODE A55, A56

7th Revised Sheet No. 4.2

Availability

This service corresponds to Minn. R. 7835.4012, .4014 (Simultaneous Purchase and Sale Billing Rate), .4015 (Time-of-Day Purchase Rates), and .4017 (Net Metered Facility; Bill Credits), and to Paragraphs 5.a, 5.b, and 5.c of the Uniform Statewide Contract for Cogeneration and Small Power Production. Available to a qualifying facility (QF) or Net Metered Facility (NMF) customer who elects to be compensated for net input into the utility's system in the form of a kilowatt-hour credit on the customer's bill for that customer's account, subject to the following conditions:

- A. The customer is not receiving a value of solar rate under Minnesota Statutes, section 216B.164, subdivision 10;
- B. The customer is interconnected with the Company; and
- C. The customer has at least 40 kilowatt AC capacity but less than 1,000 kilowatt AC capacity.

Metering charges are as set forth in the Section 10 tariff

The Company compensates the customer, in the form of an energy payment, for the bank balance for kWh credits annually at the rate set forth below.

| | | |
|---|-----------|-------------------------------|
| Energy Payment per kWh for Customers on non-time of day Service Tariffs (A55) | | <u>Annual</u> \$0.03098 |
| Time of Day Service Customers (A56) | | <u>Annual</u> |
| On Peak Energy Payment per kWh | | \$0.04065 |
| Off Peak Energy Payment per kWh | | \$0.02581 |
| Capacity Payment for FirmPower where customer receives | | <u>Oct-May</u> <u>Jun-Sep</u> |
| non-time of day retail electric service per kWh | \$0.00176 | \$0.01252 |
| time of day retail electric service per on-peak kWh | \$0.00506 | \$0.03589 |

Determination of Firm Power

The customer will have supplied firm power if during the billing period an on peak capacity factor of at least 65% was achieved. The calculation of the on peak capacity factor will be as follows: the average on peak period metered capacity delivered to the Company for the on peak period of the billing period divided by the greatest 15 minute metered capacity delivered for the on peak period of the same billing period expressed in percent and rounded to the nearest whole percent. If the percent calculated is 65 or greater, capacity payment will be made. If the percent calculated is less than 65, capacity payment will not be made.

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

ANNUAL NET METERING(KWH BANKING OPTION)

Section No. 9

RATE CODE A55, A56 (Continued)

1st Revised Sheet No. 4.3

TERMS AND CONDITIONS OF SERVICE

1. Electric service provided by Company to customer in excess of energy delivered by the QF or NMF including the depletion of any banked excess generation at the same site shall be billed in accordance with the retail rate applicable to customer.
2. For demand metered General Service customers, the entire kW demand supplied by the Company at the same site during the same billing period shall be billed to the customer according to the appropriate general service demand charge rate.
3. Interconnection charges will be assessed by the Company on an individual basis for all costs associated with addition to or modification of Company facilities to accommodate the customer. The net interconnection charge is the responsibility of the customer.
4. The voltage and phase of customer's generator must be consistent with existing service and approved by the Company.
5. The customer must comply with the MN Technical Requirements.
6. Individual System Capacity Limits apply.
7. The Company will credit customers electing to "bank" annually via an on-bill credit for that customer's account posted on the bill following the billing cycle that includes December 31 and reflects payment for the bank balance for kWh credits accumulated up through the closing date on that bill which includes December 31. The effect of netting customer generation against customer use occurs on a roughly annual basis, but for administrative purposes may be a few days off from a calendar year. The bank balance increases or decreases monthly, but at end of any given monthly billing cycle never goes below zero.
8. To choose Annual Net Metering, the customer should select Paragraphs 5.a. in the Uniform Statewide Contract for Cogeneration and Small Power Production, in addition to either Paragraph 5.b. or 5.c of that contract.

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RULES AND REGULATIONS APPLICABLE TO

Section No. 9

COGENERATION AND SMALL POWER PRODUCTION

3rd Revised Sheet No. 5

FACILITIES

APPLICATION OF THE MN DIP

To the extent that an application or interconnection is subject to the MN DIP, and there is any inconsistency between the interconnection requirements of this Section 9 related to Cogeneration and Small Power Production and the MN DIP as set forth in the Section 10 tariff or the MN Technical Requirements, the interconnection requirements of the MN DIP and MN Technical Requirements shall control over the interconnection requirements of this Section 9 tariff related to Cogeneration and Small Power Production. Notwithstanding this, for purposes of interpreting this Section 9 tariff related to Cogeneration and Small Power Production the MN DIP or MN Technical Requirements will not control over the interconnection requirements of this Section 9 tariff related to Cogeneration and Small Power Production that define the terms "Qualifying Facility" and "Generation System".

FACILITY LOCATION AND COMPLIANCE

Customer agrees to locate the qualifying facility (QF) or Net Metered Facility (NMF) so as to not cause a hazard to the Company distribution system. Wind generators may only be installed at Company approved locations that preclude any possibility of the generation system contacting any Company facilities if the system accidentally topples over. The total tower height, including the propeller when in the highest position, must be used in the determination. Customer agrees that the installation shall be in compliance with all applicable electric codes and the QF will be operated only after the installation has been inspected and approved by the appropriate authorities. Customer understands and agrees that Company approval of the proposed or installed QF does not preclude the necessity of customer obtaining all required permits, building and zoning variations, and applicable inspections.

TECHNICAL INTERCONNECTION REQUIREMENTS

The MN Technical Requirements apply. Before a customer signs the Uniform Statewide Contract, the Company must distribute to that customer a copy of, electronic link to, the then-current MN Technical Requirements.

CONNECTION AND SAFETY DISCONNECT SWITCH

Company agrees to permit customer to connect the proposed QF to the Company distribution system on the load side of customer's meter. The connection must be made through a customer provided, customer installed, National Electrical Manufacturer's Association approved, manual safety disconnect switch of adequate ampere capacity. The switch shall not open the neutral when the switch is open. This switch shall have provisions for being padlocked in the open position with a standard Company padlock. Customer agrees to locate the switch in a position accessible to Company personnel, and further agrees that the switch may be operated by Company personnel at all times that such operation is deemed necessary by Company for safety and operating reasons. QF's using line commutated synchronous inverters shall have the inverters connected on the load side (QF side) of the safety disconnect switch.

(Continued on Sheet No. 9-5.1)

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RULES AND REGULATIONS APPLICABLE TO COGENERATION

Section No. 9

ANDSMALL POWER PRODUCTION FACILITIES (Continued)

Original Sheet No. 5.1

DISTRIBUTION SYSTEM ADEQUACY

The proposed QF installation will be reviewed by Company to determine adequacy of the associated Company distribution system components. The customer agrees to reimburse Company for the addition, modification, or replacement of any distribution system components made necessary by customer's QF or NMF installation.

INTERFERENCE

Customer agrees to disconnect the QF or NMF from the Company distribution system or to reimburse Company for cost of necessary system modifications if operation of the QF or NMF causes radio, television, or electrical service interference to other customers, or interference with the operation of Company's system.

SPECIAL METERING

Customer agrees to allow Company at Company's expense to install necessary special metering and measuring equipment at the above address to provide information on the effect of the QF or NMF.

(Continued on Sheet No. 9-6)

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RULES AND REGULATIONS APPLICABLE TO

Section No. 9

COGENERATION AND SMALL POWER PRODUCTION

3rd Revised Sheet No. 6

FACILITIES (Continued)

MAIN SERVICE METERING SCENARIOS

1. No Sale to Company

If customer does not intend to sell energy to Company, the billing of customer's electrical consumption provided by Company will be on the available retail rates and the electric meter measuring this consumption will be configured to allow measurement only of energy flow into the customer's premises. Customer will provide all meter socket replacement and rewiring required to accommodate this meter that measures energy flow in one direction only. Where the customer chooses no sale to the Company, the customer will need to sign either the Section 10 Interconnection Agreement where the MN DIP does not apply, or the MN DIA where the MN DIP does apply, but does not need to sign the Section 9 Uniform Statewide Contract. Even if the no sale option is selected, for systems sized 40 kW AC or larger, the customer will still need a production meter for a new interconnection of a generating system, and the metering charge will correspond to the applicable metering charge in the Section 10 tariff.

Or

2. Sales of All or Part of Customer Produced Energy

If customer intends to sell energy to Company under this Section 9 tariff, a meter will be installed by the Company that will record energy delivered. Production meters are not required for systems rated under 40 kW. Customer will provide all meter socket replacement and rewiring required to install any applicable meter.

REVENUE LOSS

Company shall not be liable for revenue lost by customer due to Company's inability to purchase or wheel customer generated energy for any reason not within Company's reasonable control.

(Continued on Sheet No. 9-7)

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RULES AND REGULATIONS APPLICABLE TO

Section No. 9

COGENERATION AND SMALL POWER PRODUCTION

2nd Revised Sheet No. 7

FACILITIES (Continued)

KIND OF CUSTOMER SERVICE SUPPLIED TO COMPANY

Customer agrees to supply and Company agrees to accept electric service in the form of 277/480 3ph phase, 3 wire for single phase and 4 wire for three phase wire, alternating current at a nominal frequency of 60 hertz, and at a nominal voltage of 277/480 3ph located at 2801 Red Wing Blvd., Hastings, Dakota, Minnesota, 55033

PARALLEL OPERATION

Customer shall provide the necessary equipment as approved by Company to operate the QF or NMF in parallel with Company's distribution system. The QF or NMF shall be equipped consistent with the MN Technical Requirements.

INSURANCE

The customer shall maintain during the term of this agreement liability insurance which insures customer against all claims for property damage and for personal injury or death arising out of, resulting from, or in any manner connected with the installation, operation, and maintenance of the QF or NMF. The insurance requirements are as set forth in the Section 10 tariff.

SPECIAL LOSS FACTOR ADJUSTMENT

If the SQF is located at a site outside Company service territory and energy is delivered to Company through facilities owned by another utility, energy payments will be adjusted downward reflecting losses occurring between point of generation and point of receipt by Company.

(Continued on Sheet No. 9-8)

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RULES AND REGULATIONS APPLICABLE TO COGENERATION

Section No. 9

AND SMALL POWER PRODUCTION FACILITIES (Continued)

3rd Revised Sheet No. 8

SPECIAL INTERCONNECTION FACILITIES

The metering charge assumes common use of all Company facilities, up to the metering point, for both receipt and delivery of energy. Any additional facilities required by Company to accommodate the QF or NMF will require QF or NMF to pay a net interconnection charge in advance.

METERING REQUIREMENTS

The QF or NMF shall make provision for on-site metering. On-site use of QF or NMF output shall be unmetered for purposes of compensation. QF or NMF shall cooperate with and allow Company to install and have access to on-site monitoring equipment for purposes of gathering QF or NMF performance data. A Company-owned bi-directional meter is required to be installed at each service location associated with each new Customer generation source subject to this tariff. A production meter may be required, in addition to the bi-directional meter, in certain circumstances. A production meter is not required for systems rated under 40 kW AC, unless that system is subject to an incentive or program rule requiring a production meter (e.g., Solar*Rewards). A production meter is required for all systems rated 40 kW AC or above. Customer will provide all meter housing and socket replacement and rewiring to install the metering.

BI-DIRECTIONAL METER

A bi-directional meter located at the main service will record energy delivered to the customer from the Company, and energy received by the Company from customer. Installation of a new bi-directional meter may not be required if the configuration of a customer's facilities allows and a previously installed bi-directional meter provides the information necessary for billing purposes.

PRODUCTION METER

The second (Production) meter will record energy generated by the QF or NMF system only. The Company shall install, or cause to be installed, own, operate and maintain the Production meter to measure the AC production of the QF or NMF system when a production meter is required. At customer's request, additional production meters, beyond Company-required production meters, may be installed if approved by the Company at the Customer's expense.

METERING CHARGES

Customer shall be charged the applicable metering charges as set forth in the Section 10 tariff. Payment for any additional facilities required by Company to accommodate the QF or NMF system will be consistent with the MN DIP, and where applicable, the MN DIA.

(Continued on Sheet No. 9-8.1)

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RULES AND REGULATIONS APPLICABLE TO COGENERATION

Section No. 9

AND SMALL POWER PRODUCTION FACILITIES (Continued)

Original Sheet No. 8.1

AGGREGATION OF METERS

The Company will aggregate meters at the request of a customer for services provided under Rate Codes A50, A51, A52, A53, A54, A55 or A56. The Company must aggregate for billing purposes a customer's designated distributed generation bi-directional meter with one or more aggregated retail meters if a customer requests that it to do so. To qualify for aggregation:

1. the meters must be located on contiguous property owned by the customer requesting the aggregation,
2. the account(s) associated with the meters must be in the name of the same customer,
3. the retail services associate with the aggregated meters of a customer must be either all time-of-day or all non-time-of-day,
4. the total of all aggregated meters must be subject in the aggregate to the size limitation under the single Rate Code chosen by the customer applicable to all of the aggregated meters (i.e., Rate Code A50, A51, A52, A53, A54, A55 or A56), and
5. if the customer has chosen the A53, A54, A55 or A56 rate code, the total of all aggregated meters is subject in the aggregate to the Individual System Capacity Limits,

As the term is used here, "contiguous property" means property owned or leased by the customer sharing a common border, without regard to interruptions in contiguity caused by easements, public thoroughfares, transportation rights-of-way, or Company rights-of-way. The Company must comply with a request by a customer-generator to aggregate additional meters within 90 days. The specific meters must be identified at the time of the request. In the event that more than one meter is identified, the customer must designate the rank order for the aggregated meters to which the net metered credits are to be applied. At least 60 days prior to the beginning of the next annual billing period, a customer may amend the rank order of the aggregated meters. The aggregation of meters applies only to charges that use kilowatt-hours as the billing determinant. All other charges applicable to each meter account shall be billed to the customer. The Company will first apply the kilowatt-hour credit to the charges for the designated meter and then to the charges for the aggregated meters in the rank order specified by the customer. If the Net Metered Facility supplies more electricity to the Company than the energy usage recorded by the customer-generator's designated and aggregated meters during a monthly billing period, the Company will apply, at the election of the customer, any excess production based on a monthly credit (Rate Codes A50, A51, A52, A53 or A54) or the Annual Metering (kWh Banking Option, Rate Codes A55 or A56). Where a monthly credit is chosen, Company shall apply monetary credits to the customer's next monthly bill for the excess kilowatt-hours. The fee to cover the administrative costs incurred in implementing meter aggregation requests is \$3.00 per month per retail meter for the meters that are aggregated.

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RULES AND REGULATIONS APPLICABLE TO COGENERATION

Section No. 9

AND SMALL POWER PRODUCTION FACILITIES (Continued)

1st Revised Sheet No. 8.2

OWNERSHIP OF RENEWABLE ENERGY CREDITS

Generators own all renewable energy credits unless:

- A. other ownership is expressly provided for by a contract between a generator and a utility;
- B. state law specifies a different outcome; or
- C. specific Commission orders or rules specify a different outcome.

DISTRIBUTED GENERATION PPAs WHERE RATE CODES A51-A56 DO NOT APPLY

If a qualifying facility (QF) has capacity of at least 40 kW AC but less than 1,000 kW AC and does not comply with the Individual System Capacity Limits, then the rate codes A51-A56 do not apply. These rate codes also do not apply, for example, where the QF or other distributed generation (DG) has a capacity of 1,000 kW AC or more. In circumstances where Rate Codes A51-A56 do not apply, then the Section 9 Uniform Statewide Contract also does not apply. Where the Section 9 Uniform Statewide Contract does not apply, the DG customer may apply for interconnection under the Company's Section 10 tariff. Whether the Company pays for energy or capacity delivered to it would depend on whether there is a power purchase agreement (PPA) and further depend on the rates, terms and conditions in the PPA. Nothing in this tariff shall be construed to obligate Company to enter into a PPA. The obligation to enter into such a PPA with a DG customer takes into consideration many factors, including whether there is a Legally Enforceable Obligation (LEO) of the Company to enter into such a PPA and the proposed rates, terms and conditions. The Company may also voluntarily enter into a PPA with a DG customer. Should a DG customer and Company enter into a PPA where the Section 9 Uniform Statewide Contract does not apply (and no other Section 9 tariffed contract applies, such as a Solar*Rewards contract), then the following procedures will apply:

1. If the DG is over 10 MW AC nameplate capacity, the PPA along with the associated Interconnection Agreement will need to be approved by the Commission.
2. If the DG has a nameplate capacity of 40 kW up to and including 10 MW AC, and is for a term of more than 5 years, the Company shall file the PPA with the Commission and the Company shall be permitted to proceed with the PPA beginning 32 days after filing if no objection or intent to object is filed within 30 days of filing. If there is an objection or intent to object filed in this 30-day time frame, then the Commission will need to issue an order approving the PPA before the PPA is approved.
3. If the DG has a nameplate capacity of 40 kW up to and including 10 MW AC, and is for a term of 5 years or less, the Company may proceed with the PPA, but the Commission can examine the prudence of rates in the PPA during any request for rate recovery..
4. Notwithstanding the above, if the Commission has otherwise directed that a Commission order is needed for the PPA to be approved then that Commission directive shall apply.

Northern States Power Company, a Minnesota corporation

Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

STANDARD CONTRACT AND AGREEMENT FORMS

Section No. 9

1st Revised Sheet No. 9

Listed below are the titles of standard contract or service agreement forms Company requires of customers for cogeneration and small power production purchase services. Copies of the forms are shown on the following sheets in the order listed.

1. Uniform Statewide Contract for Cogeneration and Small Power Production Facilities

The form for the Uniform Statewide Contract must be applied to all new and existing interconnections between the Company and cogeneration and small power production facilities having less than 1,000 kilowatts AC of capacity except that any existing interconnection contract executed between the Company and a QF with capacity of less than 40 kilowatts AC remains in force until terminated by mutual agreement of the parties or as otherwise specified in the contract.

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

UNIFORM STATEWIDE CONTRACT FOR

Section No. 9

COGENERATION AND SMALL PRODUCTION

2nd Revised Sheet No. 10

FACILITIES

**UNIFORM STATEWIDE CONTRACT FOR
COGENERATION AND SMALL POWER PRODUCTION FACILITIES**

THIS CONTRACT is entered into on Sep 18, 2024, by Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. (hereafter called "Utility") and City of Hastings (hereafter called "QF").

RECITALS

The QF has installed electric generating facilities, consisting of an interconnected qualified facility, rated at 125.000 kilowatts of electricity, on property located at 2801 Red Wing Blvd., Hastings, Dakota, Minnesota, 55033.

The QF is prepared to generate electricity in parallel with the Utility.

The QF's electric generating facilities meet the requirements of the Minnesota Public Utilities Commission (hereafter called "Commission") rules on Cogeneration and Small Power Production and any technical standards for interconnection the Utility has established that are authorized by those rules.

The Utility is obligated under federal and Minnesota law to interconnect with the QF and to purchase electricity offered for sale by the QF.

A contract between the QF and the Utility is required by the Commission's rules.

AGREEMENTS

The QF and the Utility agree:

- 1. The Utility will sell electricity to the QF under the rate schedule in force for the class of customer to which the QF belongs.
- 2. The Cooperative Electric Association or Municipally Owned Electric Utility will buy electricity from the QF under the current rate schedule filed with the Commission. The QF elects the rate schedule category hereinafter indicated:
 - _____ a. Average retail utility energy rate under part 7835.3300.
 - _____ b. Simultaneous purchase and sale billing rate under part 7835.3400.
 - _____ c. Time-of-day purchase rates under part 7835.3500.

A copy of the presently filed rate schedule is attached to this contract.

(Continued on Sheet No. 9-10.1)

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

UNIFORM STATEWIDE CONTRACT FOR

Section No. 9

COGENERATION AND SMALL PRODUCTION

Original Sheet No. 10.1

FACILITIES (Continued)

3. The Public Utility will buy electricity from the QF under the current rate schedule filed with the Commission. If the QF has less than 40 kilowatts capacity, the QF elects the rate schedule category hereinafter indicated:

- _____ a. Average retail utility energy rate under part 7835.4013.
- _____ b. Simultaneous purchase and sale billing rate under part 7835.4014.
- _____ c. Time-of-day purchase rates under part 7835.4015.

A copy of the presently filed rate schedule is attached to this contract.

4. The Public Utility will buy electricity from the QF under the current rate schedule filed with the Commission. If the QF is not a net metered facility and has at least 40 kilowatts capacity but less than 1,000 kilowatt capacity, the QF elects the rate schedule category hereinafter indicated:

- _____ a. Simultaneous purchase and sale billing rate under part 7835.4014.
- _____ b. Time-of-day purchase rates under part 7835.4015.

A copy of the presently filed rate schedule is attached to this contract.

5. The Utility will buy electricity from a net metered facility under the current rate schedule filed with the Commission or will compensate the facility in the form of a kilowatt-hour credit on the facility's energy bill. If the net metered facility has at least 40 kilowatts capacity but less than 1,000 kilowatts capacity, the QF elects the rate schedule category hereinafter indicated (choose par. a, and then also choose either par. b or par. c): A55

- _5/A_ a. Kilowatt-hour energy credit on the customer's energy bill, carried forward and applied to subsequent energy bills, with an annual true-up under part 7835.4017.
- _A55_ b. Simultaneous purchase and sale billing rate under part 7835.4014.
- _____ c. Time-of-day purchase rates under part 7835.4015.

A copy of the presently filed rate schedule is attached to this contract.

6. The rates for sales and purchases of electricity may change over the time this contract is in force, due to actions of the Utility or of the Commission, and the QF and the Utility agree that sales and purchases will be made under the rates in effect each month during the time this contract is in force.

(Continued on Sheet No. 9-11)

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

UNIFORM STATEWIDE CONTRACT FOR

Section No. 9

COGENERATION AND SMALL PRODUCTION

1st Revised Sheet No. 11

FACILITIES (Continued)

7. The Utility will compute the charges and payments for purchases and sales for each billing period. Any net credit to the QF, other than kilowatt-hour credits under clause 5, will be made under one of the following options as chosen by the QF: **Bill Credit**

- a. Credit to the QF's account with the Utility.
- b. Paid by check to the QF within 15 days of the billing date.

8. Renewable energy credits associated with generation from the facility are owned by: City of Hastings (QF) .

9. The QF must operate its electric generating facilities within any rules, regulations, and policies adopted by the Utility not prohibited by the Commission's rules on Cogeneration and Small Power Production which provide reasonable technical connection and operating specifications for the QF. (Northern States Power Company's Rules and Regulations Applicable to Cogeneration and Small Power Production Facilities are attached). This agreement does not waive the QF's right to bring a dispute before the Commission as authorized by Minnesota Rules, part 7835.4500, and any other provision of the Commission's rules on Cogeneration and Small Power Production authorizing Commission resolution of a dispute.

10. The Utility's rules, regulations, and policies must conform to the Commission's rules on Cogeneration and Small Power Production.

11. The QF will operate its electric generating facilities so that they conform to the national, state, and local electric and safety codes, and will be responsible for the costs of conformance.

12. The QF is responsible for the actual, reasonable costs of interconnection which are estimated to be \$ (No fees outstanding). The QF will pay the Utility in this way: Consistent with the process outlined in the Section 10 Interconnection Tariff.

13. The QF will give the Utility reasonable access to its property and electric generating facilities if the configuration of those facilities does not permit disconnection or testing from the Utility's side of the interconnection. If the Utility enters the QF's property, the Utility will remain responsible for its personnel.

14. The Utility may stop providing electricity to the QF during a system emergency. The Utility will not discriminate against the QF when it stops providing electricity or when it resumes providing electricity.

(Continued on Sheet No. 9-12)

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

UNIFORM STATEWIDE CONTRACT FOR

Section No. 9

COGENERATION AND SMALL PRODUCTION

1st Revised Sheet No. 12

FACILITIES (Continued)

15. The Utility may stop purchasing electricity from the QF when necessary for the Utility to construct, install, maintain, repair, replace, remove, investigate, or inspect any equipment or facilities within its electric system. The Utility will notify the QF before it stops purchasing electricity in this way: Consistent with the process outlined in the Section 10 Interconnection Tariff.

16. The QF will keep in force liability insurance against personal or property damage due to the installation, interconnection, and operation of its electric generating facilities. The amount of insurance coverage will be consistent with the requirements of the Section 10 Interconnection Tariff. (\$300,000 for systems up to 40 kWAC; \$1,000,000 for systems larger than this up to 250 kWAC; and \$2,000,000 for systems larger than this up to 1MW) (The amount must be consistent with the Commission's interconnection standards under Minnesota Rules, par 7835.4750).

17. This contract becomes effective as soon as it is signed by the QF and the Utility. This contract will remain in force until either the QF or the Utility gives written notice to the other that the contract is canceled. This contract will be canceled 30 days after notice is given.

18. This contract contains all the agreements made between the QF and the Utility except that this contract shall at all times be subject to all rules and orders issued by the Public Utilities Commission or other government agency having jurisdiction over the subject matter of this contract. The QF and the Utility are not responsible for any agreements other than those stated in this contract.

THE QF AND THE UTILITY HAVE READ THIS CONTRACT AND AGREE TO BE BOUND BY ITS TERMS. AS EVIDENCE OF THEIR AGREEMENT, THEY HAVE EACH SIGNED THIS CONTRACT BELOW ON THE DATE WRITTEN AT THE BEGINNING OF THIS CONTRACT.

QF (System Owner)

**NORTHERN STATES POWER COMPANY,
a Minnesota corporation and wholly owned
subsidiary of Xcel Energy Inc.**

By _____ [[CertifiSignature 1 1]] _____

By _____ [[CertifiSignature 2]] _____

(Title) _____ [[CertifiTitle 1 1]] _____

(Title) **Manager and above, Customer Strategy and Solutions**

Date _____ [[CertifiDate 1 1]] _____

Date _____ [[CertifiDate 2]] _____

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2**UNIFORM STATEWIDE CONTRACT FOR**

Section No. 9

COGENERATION AND SMALL PRODUCTION

1st Revised Sheet No.

12.1

FACILITIES - Approved Nonstandard Provisions Consistent with Minn. R. 7835.9920

1. Where a tenant has signed the Uniform Statewide Contract for a generation system that is the subject of a Solar*Rewards Contract with Addendum for Solar*Rewards Customer Contract (Addressing Solar*Rewards Program for Low-Income Tenants for Single Family Homes or Multi-Unit Dwellings), and that tenant later moves out and a new tenant moves in, then that new tenant (and any subsequent tenant) who is receiving electrical service at that premise shall be entitled to the net metering benefits as set forth in the Uniform Statewide Contract without the need for that tenant to sign the Uniform Statewide Contract. The terms and conditions, and benefits and responsibilities, set forth in the Uniform Statewide Contract shall apply to the then-current tenant. In the absence of an affirmative selection by the tenant, then the A50 net metering rate code shall apply. The then-current tenant can contact Northern States Power Company by telephone or other reasonable means mutually agreed upon at any time to change this selection from among the available net metering rate codes for that premise. Northern States Power Company shall provide written notice to the then-current tenant of the applicability of the Uniform Statewide Contract and of the applicable net metering rate code.
2. Where a landlord owner of a premises is the owner of a non-Solar*Rewards DER system that is the subject of a Section 10 tariff Interconnection Agreement or MN DIA, and that DER system is connected to the meter where a tenant is the named Customer receiving retail electrical service, then the tenant (and any subsequent tenant) who is receiving electrical service at that premise shall be entitled to the net metering benefits as set forth in the Uniform Statewide Contract without the need for that tenant to sign the Uniform Statewide Contract. As used in this section, and consistent with Minn. Stat. § 216B.02, the term "tenant" means any of the following: 1. a tenant or cooperative or condominium owner in a building owned, leased, or operated by the owner of the DER system; or 2. an occupant of a manufactured home or trailer park owned, leased, or operated by the owner of the DER system. The benefits (but not the responsibilities) of net metering as, set forth in the Uniform Statewide Contract shall flow to the named customer whose meter is connected to the DER, subject to offset for metering charges. The named customer remains responsible for terms, conditions and responsibilities of all retail electric customers that may also be identified as responsibilities in the Uniform Statewide Contract. In the absence of an affirmative selection by the tenant, then the A50 net metering rate code shall apply provided that the tenant would otherwise qualify for that rate code. If the tenant does not qualify for the A50 net metering rate code, then in the absence of a selection by the tenant the A55 net metering rate code shall apply for retail customers on non-time of day service, and the A56 net metering rate code shall apply for retail customers on time of day service, provided that the tenant would otherwise qualify for these rate codes. The then-current tenant can contact Northern States Power Company by telephone or other reasonable means mutually agreed upon at any time to change this selection from among the available net metering rate codes for that premise. Northern States Power Company shall provide written notice to the then-current tenant of the applicability of certain provisions of the Uniform Statewide Contract and of the applicable net metering rate code. The monthly metering charges associated with the QF DER system would be applied to the tenant notwithstanding provisions to the contrary that may be in the Interconnection Agreement or MN DIA, and the net metering benefits less monthly metering charges are the only terms being assigned from the Interconnection Customer to the named customer receiving retail service at the meter where the DER is interconnected. This tariff provision only applies where the DER system is physically connected to the meter where a tenant is the named Customer receiving retail electric service. Accordingly, in the case of multi-tenant apartment buildings, this tariff provision only applies where the DER system is physically connected to the meter where a tenant is the named Customer receiving retail electric service.

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