Minnesota Public Utilities Commission					
DOCKET NO. E999/	PR-24-09	Reporting Year	2024		
Cogeneration and Sma	all Power Production Tariff	Utility:	Moorhead Public Service		
Report Year:	2024	Date Submitted:	December 20, 2023		

Filing Utili	ty Information	Contact Information		
Company ID#	81	Contact Name Taylor Holte		
Company Name	Moorhead Public Service	Contact Title	Project Engineer	
Street Address Line 1	PO Box 779	Contact Telephone	(218) 477-8085	
Street Address Line 2	500 Center Ave	Contact Email	tholte@mpsutility.com	
City	Moorhead			
State	MN			
Zip Code	56561			

Comments/Notes					

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Minnesota Public Utilities Commission

DOCKET NO. E999/PR-24-09

Reporting Year

Utility:

Cogeneration and Small Power Production Tariff

Moorhead Public Service

2024

Minn. Rules 7835.0500 Schedule A: Estimated Energy Costs

Schedule A must contain the estimated system average incremental energy costs by seasonal peak and off-peak periods for each of the next five years. For each seasonal period, system incremental energy costs must be averaged during system daily peak hours, system daily off-peak hours, and all hours in the season. The energy costs must be increased by a factor equal to 50 percent of the line losses shown in schedule B. Schedule A must describe in detail the method used to determine the on-peak and off-peak hours and seasonal periods and must show the resulting on-peak and off-peak hours selected.

Please include all compuation descriptions in Schedule G

Estimated Marginal Energy Costs (\$/MWh)						
		2024	2025	2026	2027	2028
	On Peak	\$36.87	\$39.36	\$40.87	\$42.44	\$41.89
Summer	Off Peak	\$23.68	\$25.35	\$26.59	\$27.60	\$27.66
	All Hours	\$30.59	\$32.69	\$34.18	\$35.44	\$35.16
	On Peak	\$35.77	\$38.18	\$39.65	\$41.17	\$40.64
Winter	Off Peak	\$25.27	\$27.05	\$28.37	\$29.45	\$29.51
	All Hours	\$30.20	\$32.27	\$33.75	\$35.00	\$34.71
	On Peak	\$36.33	\$38.78	\$40.27	\$41.82	\$41.27
Annual	Off Peak	\$24.49	\$26.21	\$27.50	\$28.54	\$28.60
	All Hours	\$30.63	\$32.73	\$34.23	\$35.49	\$35.21
nnual # hours on	-peak:	4,096	4,080	4,144	4,112	4,080

	Description of season and on-peak and off-peak periods				
Summer:	March through August				
Winter:	September through February				
On-peak period:	Monday through Friday 6 am through 10 pm EST, non-MISO holiday				
Off-peak period:					
	All non on-peak hours				

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Minnesota Public	Utilities Commission	
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Cogeneration and Small Power Production Tariff	Utility:	Moorhead Public Service
Minn Rules 7835 0600 Schedule B: Estimated Canacity Costs		

Minn. Rules 7835.0600 Schedule B: Estimated Capacity Costs

Subp. 7. Avoidable capacity costs

If the utility has neither planned generating facility additions nor planned additional capacity purchases, other than from qualifying facilities, during the ensuing ten years, the utility must be deemed to have no avoidable capacity costs.

Planned facility additions or capacity purchases

Fill out Schedule B

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
A. Name of Unit	Marshall Solar Plus					
3. Nameplate Rating	10MW					
C. Fuel Type	Solar					
D. In-Service Date	2024					
E. Completed Cost in \$/kW in the year in which	[TRADE SECRET DATA BEGINS					
he plant is expected to be put in service,						
ncluding allowance for funds used during						
construction						
F. Anticipated average annual fixed operating and						
maintenance costs in \$/kW						
G. Energy costs associated with the unit, including						
uel costs and variable operating and						
maintenance costs						
H. Projected average number of kWh/year the						
plant will generate during its useful life						
I. Average annual fuel savings resulting from the						
addition of this generating facility, stated in \$/kW	TRADE SECRET DATA ENDS					

Subp. 3. Description of all planned firm capacity purchases, other than from qualifying facilities, during the next ten years, including:						
Purchase 1	Purchase 1 Purchase 2 Purchase 3 Purchase 4 Purchase 5 Purchase 6					
2024	2024	2024	2024	2024	2025	
[TRADE SECRET DATA BEGINS					TRADE SECRET DATA ENDS]	
25,000	65,000	26,000	3,300	22,000	25,000	
[TRADE SECRET DATA BEGINS					TRADE SECRET DATA ENDS]	
	Purchase 1 2024 [TRADE SECRET DATA BEGINS 25,000	Purchase 1 Purchase 2 2024 2024 [TRADE SECRET DATA BEGINS 25,000 65,000	Purchase 1 Purchase 2 Purchase 3 2024 2024 2024 [TRADE SECRET DATA BEGINS 25,000 65,000 26,000	Purchase 1 Purchase 2 Purchase 3 Purchase 4 2024 2024 2024 2024 [TRADE SECRET DATA BEGINS 25,000 65,000 26,000 3,300	Purchase 1 Purchase 2 Purchase 3 Purchase 4 Purchase 5 2024 2024 2024 2024 2024 [TRADE SECRET DATA BEGINS 25,000 65,000 26,000 3,300 22,000	

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2024

Utility: Moorhead Public Service

Minn. Rules 7835.0600 Schedule B: Estimated Capacity Costs

Subp. 7. Avoidable capacity costs	u odditiono novalonosi odditionol sovesite		na accolificio a facilità a a deceir a the	anautina kan usana kha ukiliku		Planned facility additions or capa
	Purchase 7	Purchase 8	Purchase 9	Purchase 10	Purchase 11	Purchase 12
. Year of Purchase	2025	2025	2025	2025	2026	2026
Name of the seller	[TRADE SECRET DATA BEGINS					TRADE SECRET DATA ENDS
Number of kW of capacity to be purchased	65,000	26,000	3,300	22,000	50,000	65,000
. Capacity cost in \$/kW	[TRADE SECRET DATA BEGINS					TRADE SECRET DATA ENDS
. Associated energy costs in cents/kWh						
	Purchase 13	Purchase 14	Purchase 15	Purchase 16	Purchase 17	Purchase 18
. Year of Purchase	2026	2026	2026	2027	2027	2027
. Name of the seller	TRADE SECRET DATA BEGINS	2020	2020	2027	2027	TRADE SECRET DATA ENDS
. Number of kW of capacity to be purchased	26.000	3,300	22.000	50,000	65,000	26.000
. Capacity cost in \$/kW	[TRADE SECRET DATA BEGINS	3,300	22,000	30,000	05,000	TRADE SECRET DATA ENDS
Associated energy costs in cents/kWh	TRADE SECRET DATA BEGINS					TRADE SECRET DATA ENDS
Associated energy costs in cents/kwii						
	Purchase 19	Purchase 20	Purchase 21	Purchase 22	Purchase 23	Purchase 24
. Year of Purchase	2027	2027	2028	2028	2028	2028
. Name of the seller	[TRADE SECRET DATA BEGINS					TRADE SECRET DATA ENDS
. Number of kW of capacity to be purchased	3,300	22,000	50,000	65,000	26,000	3,300
. Capacity cost in \$/kW	[TRADE SECRET DATA BEGINS					TRADE SECRET DATA ENDS
. Associated energy costs in cents/kWh						
	Purchase 25	Purchase 26	Purchase 27	Purchase 28	Purchase 29	Purchase 30
. Year of Purchase	2028	2029	2029	2029	2029	2029
. Name of the seller	[TRADE SECRET DATA BEGINS					TRADE SECRET DATA ENDS
. Number of kW of capacity to be purchased	22,000	50,000	65,000	26,000	3,300	22,000
. Capacity cost in \$/kW	[TRADE SECRET DATA BEGINS					TRADE SECRET DATA ENDS
. Associated energy costs in cents/kWh						
	Durch and 24	D 22	D 22	Durch and 24	D 25	Bunch and 26
Variation of December 2	Purchase 31	Purchase 32	Purchase 33	Purchase 34	Purchase 35	Purchase 36
A. Year of Purchase	2030	2030	2030	2030	2030	2031
. Name of the seller	[TRADE SECRET DATA BEGINS	CE 000	25,000	2 200	22.000	TRADE SECRET DATA ENDS
. Number of kW of capacity to be purchased	50,000	65,000	26,000	3,300	22,000	50,000
D. Capacity cost in \$/kW	[TRADE SECRET DATA BEGINS					TRADE SECRET DATA ENDS
. Associated energy costs in cents/kWh						
	Purchase 37	Purchase 38	Purchase 39	Purchase 40	Purchase 41	Purchase 42
. Year of Purchase	2031	2031	2032	2033		
. Name of the seller	[TRADE SECRET DATA BEGINS					TRADE SECRET DATA ENDS
. Number of kW of capacity to be purchased	65,000	26,000	65,000	65,000		
. Capacity cost in \$/kW	TRADE SECRET DATA BEGINS					TRADE SECRET DATA ENDS
Associated energy costs in cents/kWh	[
0,						<u> </u>
	Purchase 43	Purchase 44	Purchase 45	Purchase 46	Purchase 47	Purchase 48
. Year of Purchase						
. Name of the seller						
. Number of kW of capacity to be purchased						
. Capacity cost in \$/kW						
. Associated energy costs in cents/kWh		-			-	

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Cogeneration and Small Power Produc	tion Tariff			Utility:		Moorhead Public Ser
Minn. Rules 7835.0600 Schedu	ule B: Estimated Capac	ity Costs				
Subp. 7. Avoidable capacity costs	vadditions nor planned additional car	ascity nurchases other th	nan from qualifying facilities d	uring the encuing ten vector the	s utility	Planned facility additions or capac
Subp. 4. Utility's overall average percen	tage of line losses due to dist	ribution, transmissi	ion, and transformation	of electric energy		
Average Annual line loss						
	Summer On-Peak	Summer Off-Peak	Average Summer	Winter On-Peak	Winter Off-Peak	Average Winter
Loss Factors	0.03	3	0.08	0.08	0.08	0.08
Subp. 5 Net annual avoided capacity co	st - Please show calculations	in Schedule G				
Averaged on Peak hours	\$ 0.009	The utility's net annu	ial avoided capacity cost sta	ted in dollars per kilowatt-ho	our averaged over the on-pe	ak hours and the utility's net annual avoi
Average Over All Hours	\$ 0.004	capacity cost stated i	n dollars per kilowatt-hour	averaged over all hours.		
Subp. 6 Net annual avoided capacity co	st - Please show calculations	in Schedule G				
Averaged on Peak hours						ional capacity purchases, other than from y cost stated in dollars per kilowatt-hour
Average Over All Hours		averaged over the or	n-peak hours and the utility'	s net annual avoided capacit	ty costs stated in dollars per	kilowatt-hour averaged over all hours.

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Minnesota Public Utilities Commission

Reporting Year:

DOCKET NO. E999/PR-24-09

2024

Cogeneration and Small Power Production Tariff

Utility:

Moorhead Public Service

Minn. Rules 7835.0650 Schedule C: Calculation, Average Retail Energy Rate

7835.0100 DEFINITIONS. Subp. 2a. Average retail utility energy rate. "Average retail utility energy rate" means, for any class of utility customer, the quotient of the total annual class revenue from sales of electricity minus the annual revenue resulting from fixed charges, divided by the annual class kilowatt-hour sales. Data from the most recent 12-month period available before each filing required by parts 7835.0300 to 7835.1200 must be used in the computation.

Rate Class	Total Class Revenue	Fixed Charges	kWh Sales	Average Retail Energy Rate
Residential	\$ 20,200,175.11	\$ 3,256,517.06	178,978,937.00	\$ 0.0947
Small Gen Service No Demand	\$ 1,567,583.98	\$ 341,417.53	12,715,822.00	\$ 0.0964
Small Gen Service w/ Demand	\$ 1,357,025.64	\$ 120,874.46	12,075,286.00	\$ 0.1024
General Service Secondary	\$ 11,730,512.85	\$ 244,187.18	129,960,932.00	\$ 0.0884
General Service Primary	\$ 5,792,006.82	\$ 4,620.00	78,116,730.22	\$ 0.0741

1 of 1 4. Schedule C

Cogeneration and Small Power Production Tariff (Schedules D - F)

<u>Due:</u> January 2

<u>Statute/Rule reference</u>: <u>Rules 7835.0300 – 7835.1200</u> (reporting requirements are

identified in the rules)

<u>Comments</u>: Wholesale suppliers may provide Schedules A, B, and G to their

members to facilitate reporting.

Report Year	2024				
Date Submitted	December 20, 2023				
Filing Utility Information					
Company ID# 81					
Company Name	Moorhead Public Service				
Street Address Line 1	PO Box 779				
Street Address Line 2	500 Center Ave.				
City	Moorhead				
State	MN				
Zip Code	56561				
	Contact Information				
Contact Name	Taylor Holte				
Contact Title	Project Engineer				
Contact Telephone	(218) 477-8085				
Contact Email	tholte@mpsutility.com				
Comments/Notes					

Schedule D

(Rule 7835.0700)

Uniform Statewide Contract for Cogeneration and Small Power Production Facilities

Schedule D must contain all standard contracts to be used with qualifying facilities, containing applicable terms and conditions.

INTERCONNECTION AND POWER PURCHASE AGREEMENT – 100 kW or Less (MN STANDARD AGREEMENT)

This Interconnection and	Power Purchase Agreement –	100 kW or Less (MN Standard
Agreement) (the "Agreement") is	s made and entered into	, 20, by and among
Missouri Basin Municipal Power	Agency, d/b/a Missouri River	r Energy Services, 3724 West
Avera Drive, PO Box 88920, Sio	oux Falls, SD 57109-8920, a bo	ody politic and corporate and public
agency organized in Iowa and ex	isting under the laws of the St	ates of Iowa, Minnesota, North
Dakota and South Dakota ("MRE	<u>ES</u> "),	, [Address] (" <u>Local</u>
Utility"), and	, with an address as set forth is	n Exhibit A hereto ("Customer").
MRES, Local Utility and Custom	ner are each individually referi	red to herein as a "Party" and
collectively as the "Parties."		

RECITALS

- A. Customer has installed, or plans to install, electric generating facilities rated at 100 kilowatts or less of electricity on certain real property owned or leased by Customer, which facilities and property are more particularly described in the MN Interconnection Application attached to this Agreement as Exhibit A. The generating facilities are hereinafter referred to as the "Qualifying Facility".
- B. Local Utility is a municipal utility that owns and operates an electrical distribution system (the "<u>Local Utility System</u>") and provides retail electric power to Customer and other customers.
- C. MRES is a joint action agency that supplies wholesale electric power supply to Local Utility pursuant to a long-term exclusive supply contract that requires Local Utility to purchase from MRES all electric power supply in excess of that provided by the Western Area Power Administration.
- D. Pursuant to a waiver/agreement with the Federal Energy Regulatory Commission under the Public Utility Regulatory Policies Act ("<u>PURPA</u>"), MRES is required to purchase power from "qualifying facilities," as defined by PURPA, and Local Utility is required to interconnect, supply power to, and allow qualifying facilities to operate in parallel with the Local Utility System. MRES and Local Utility are also permitted, but not required, to take such actions with respect to electric generating facilities which do not constitute "qualifying facilities" under PURPA.
- E. Customer desires to interconnect and operate the Qualifying Facility in parallel with the Local Utility System and sell power generated by the Qualifying Facility to MRES, and Local Utility and MRES are willing to do so pursuant to the terms and conditions of this Agreement.

NOW, THEREFORE, the Parties hereby agree as follows:

1. <u>Scope and Purpose</u>. This Agreement sets forth the terms and conditions under which the Qualifying Facility may be interconnected to, and operated in parallel with, the Local

Utility System and under which MRES will purchase electrical energy generated by the Qualifying Facility. This Agreement does not constitute an agreement by MRES or Local Utility to deliver electrical energy generated by the Qualifying Facility or to provide any services to Customer except as described in this Agreement.

- 2. <u>Interconnection Rules</u>. The procedures and technical requirements governing the interconnection and operation of the Qualifying Facility are described in the documents of Local Utility entitled "MN Interconnection Process" (the "<u>Procedures</u>") and "Technical Specifications Manual" (the "<u>Requirements</u>"), each as may be amended by Local Utility from time to time (collectively, the "<u>Interconnection Rules</u>"). Local Utility shall have the right to amend the Interconnection Rules from time to time in its sole discretion. The Interconnection Rules are incorporated and made part of this Agreement by this reference. Customer acknowledges it has received a copy of the Interconnection Rules and agrees to comply with the terms of the Interconnection Rules. In the event any terms of this Agreement conflict with the terms of the Interconnection Rules, the terms of this Agreement shall govern. All capitalized terms used in this Agreement shall have the meanings given them in the Interconnection Rules, unless otherwise expressly provided herein.
- 3. <u>Point of Common Coupling</u>. The point where the Interconnection Facilities connect with the Local Utility System is the Point of Common Coupling ("<u>PCC</u>") as shown on the diagram in Exhibit A. The diagram included in Exhibit A shall depict the PCC, the location of meter(s), the point of delivery, and such other detail as may be required by Local Utility. Customer and Local Utility shall interconnect the Qualifying Facility to the Local Utility System at the PCC in accordance with the Interconnection Rules and all applicable laws, regulations and prudent utility practices. Local Utility and Customer shall each own and be responsible for the installation, maintenance and repair of the lines, wires, switches and other equipment on their respective sides of the PCC. Unless otherwise specified in Exhibit B, Customer, at its cost, shall furnish, install, own, maintain and repair all interconnection equipment required at the PCC, in accordance with the Interconnection Rules and applicable laws, regulations and prudent utility practices. Final electrical connections between the Local Utility System and the Qualifying Facility shall be made by Local Utility.
- 4. <u>Installation, Operation and Maintenance of Qualifying Facility</u>. Customer shall install, operate and maintain the Qualifying Facility in accordance with the terms of this section.
 - a. Responsibility; Standards. Customer shall install, operate, maintain, repair and inspect the Qualifying Facility and shall be fully responsible for the Qualifying Facility, unless otherwise provided herein. Customer's installation, operation, maintenance and repair of the Qualifying Facility shall be in accordance with this Agreement, the Interconnection Rules, all applicable laws, regulations, ordinances and building codes, and, as applicable, the National Electrical Safety Code ("NESC"), American National Standards Institute ("ANSI"), Institute of Electrical and Electronic Engineers ("IEEE"), National Electrical Code ("NEC"), and Underwriter's Laboratory ("UL"). In addition, Customer shall maintain the Qualifying Facility in accordance with applicable manufacturers' recommended maintenance schedules.

- b. <u>Costs</u>. Unless otherwise specified in Exhibit B, Customer shall be responsible for all costs associated with the Qualifying Facility, including all costs of installation, operation, maintenance, inspection and repair. Customer shall pay for the actual cost of the Interconnection Facilities and Distribution Upgrades along with Local Utility's cost to commission the proposed DER system. An estimate of the interconnection costs are set forth in Exhibit B.
- c. <u>Permits</u>. Prior to installation of the Qualifying Facility, Customer shall obtain all environmental and other permits required by any governmental authorities to install, own and operate the Qualifying Facility. Customer shall maintain and comply with the requirements of all such permits during the term of this Agreement.
- d. <u>Disruption to Local Utility System</u>. Customer shall design, install, equip, maintain, operate and repair the Qualifying Facility to ensure that the Local Utility System and Local Utility's service to other customers are not adversely affected by the Qualifying Facility, either due to disruptions to the Local Utility System or power quality issues.
- e. <u>Alterations</u>. Customer shall not alter, modify or add to the Qualifying Facility without receiving a prior written determination of Local Utility, in accordance with the Interconnection Rules, as to whether the proposed alteration, modification or addition constitutes a Material Modification to the Interconnection Application. Not less than twenty (20) days prior to the commencement of any proposed alteration, modification or addition to the Qualifying Facility, Customer shall notify Local Utility of the proposal and provide Local Utility with all information reasonably required by Local Utility to review such proposal, including any change in generation capacity of the Qualifying Facility and any alterations to applicable interconnection equipment. Local Utility shall have ten (10) days to notify Customer in writing of Local Utility's final determination of the proposed modification.
- f. <u>Operator in Charge</u>. Customer shall identify an individual (by name or title) who will act as "Operator in Charge" of the Qualifying Facility. This individual must be familiar with the terms of this Agreement, the Interconnection Rules, and any other laws, regulations or agreements that may apply to the Qualifying Facility.
- 5. <u>Electric Service</u>. Local Utility shall provide electric service to Customer for the electricity requirements of Customer not supplied by the Qualifying Facility. Such electric service shall be supplied by Local Utility under the rules and rate schedules of Local Utility applicable to Customer's class of service, as revised from time to time by Local Utility in its sole discretion.

6. Metering.

a. <u>Metering Equipment</u>. Local Utility shall purchase, own, install and maintain such metering equipment as is necessary to meter all electrical energy of the Qualifying Facility delivered to the Local Utility System, consistent with the metering arrangement elected pursuant to subsection (b) below. The metering equipment and cost responsibilities associated with such equipment are set forth in Exhibit B. Local Utility shall test the metering equipment on a scheduled basis. If the metering equipment fails to

register proper amounts or the registration thereof becomes so erratic as to be meaningless, the energy delivered to the Local Utility System shall be determined by Local Utility from the best information available.

- b. <u>Metering Arrangement</u>. The metering arrangement used to meter and record electrical energy delivered from the Qualifying Facility to the Local Utility System, and from the Local Utility to Customer, shall be as set forth in attached Exhibit B.
- 7. Testing. Customer shall test the Qualifying Facility and interconnection equipment and provide to Local Utility all records of testing in accordance with the Interconnection Rules. Such testing shall occur prior to commencement of operation of the Qualifying Facility and periodically thereafter, in accordance with the Interconnection Rules or as otherwise requested by Local Utility. Local Utility and MRES shall have the right to witness all field testing and review all records prior to allowing the Qualifying Facility to commence normal operations. Such tests are for purposes of assuring the protection and operation of the Local Utility System and in no way represent any assurance of protection and operation of the Qualifying Facility.
- 8. <u>Right of Access; Inspection</u>. Local Utility and MRES shall have the right to inspect the Qualifying Facility and observe the Qualifying Facility's installation, commissioning, startup, operation and maintenance. Local Utility and MRES shall have access to the Qualifying Facility for any reasonable purpose in connection with the interconnection described in this Agreement or the Interconnection Rules or to provide service to other customers.
- 9. <u>Disconnection</u>. The Qualifying Facility shall or may be disconnected from the Local Utility System at such times as described in, and in accordance with, the terms of this section.
 - a. <u>Disconnection by Customer</u>. Customer shall disconnect the Qualifying Facility from the Local Utility System upon the effective date of the termination of this Agreement as described in Section 15 below.
 - b. <u>Disconnection by Local Utility</u>. Local Utility shall have the right to disconnect, or cause Customer to disconnect, the Qualifying Facility from the Local Utility System for the following reasons: (i) to allow Local Utility to operate, construct, install, maintain, repair, replace or inspect any facilities of Local Utility; (ii) the disruption or potential disruption of the Local Utility System as described in Section 4(d) above; (iii) the presence of a condition which could cause injury or loss of life or damage to the Local Utility System or property of a third party; (iv) if Local Utility is required to disconnect by MRES or Local Utility's transmission provider; (v) Customer's noncompliance with the terms of this Agreement; (vi) the termination of this Agreement as provided in Section 15 below; or (vii) any other reason for disconnection as set forth in the Interconnection Rules. Local Utility shall use reasonable efforts to provide prior notice and coordination of any disconnection of the Qualifying Facility due to routine maintenance, repairs or modifications to the Local Utility System. Neither Local Utility nor MRES shall be liable to Customer for any damages, losses or other liabilities, including consequential damages, due to the disconnection of the Qualifying Facility as described in this section.

- 10. <u>Interconnected Operation</u>. Customer may operate interconnected with the Local Utility System only in accordance with this Agreement and the Interconnection Rules. Local Utility, MRES and Customer shall comply with all requirements of the transmission provider and any regulatory authorities having jurisdiction over distributed generation interconnected to the Local Utility System.
- the Qualifying Facility which is received by the Local Utility System. The rate paid by MRES for such electrical energy shall be equal to the sum of: (a) the MRES PURPA rate for qualifying facilities of 100 kW or less, as adjusted from time to time by MRES in its discretion, and (b) the Loss Factor Adjustment, as adjusted from time to time by MRES and Local Utility in their discretion. The MRES PURPA rate and the Loss Factor Adjustment, along with their currently applicable amounts, are described in attached Exhibit B. Customer shall receive payment for electrical energy sales to MRES through a credit on Customer's monthly invoice from Local Utility, which credit may be one month in arrears. MRES, in turn, shall credit the monthly wholesale power supply bill submitted by MRES to Local Utility in an amount equal to the electrical energy purchases of MRES from the Qualifying Facility during the preceding month. Local Utility shall provide to MRES, as soon as available following the end of each month, data indicating the amount of electrical energy purchased by MRES from the Qualifying Facility during the preceding month.
- 12. <u>Limitation of Liability</u>. Each Party's liability to the other Parties 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 its obligations under this Agreement shall be limited to the amount of direct damage actually incurred. In no event shall a Party be liable to another party under this Agreement for any punitive, incidental, indirect, special or consequential damages, including for loss of business opportunity or profits. In addition, and notwithstanding any other provision in this Agreement, Local Utility's liability to Customer under this Agreement shall be further limited as set forth in Local Utility's tariffs and/or terms and conditions for electric service, which limitations are incorporated herein by this reference.
- 13. <u>Insurance</u>. Customer shall maintain general liability insurance in accordance with the terms of the Interconnection Rules.
- 14. <u>Default; Remedies</u>. A Party shall be in default under this Agreement if such Party fails to comply with, observe or perform, or defaults in the performance of, any covenant or obligation under this Agreement and fails to cure the failure within thirty (30) days after receiving written notice from another Party, which notice shall identify the basis of the default. If a default is not cured within the cure period, the non-defaulting Party or Parties shall have the right to terminate this Agreement by written notice to the defaulting Party, shall be relieved of any further obligation under this Agreement, and shall be entitled to pursue all other damages and remedies available under this Agreement or at law or in equity.
- 15. <u>Term.</u> This Agreement shall take effect upon execution by all Parties hereto and shall remain in effect unless terminated in accordance with this section. This Agreement may be terminated as follows: (a) any Party may terminate this Agreement at any time upon ninety (90) days' written notice to the other Parties; (b) Local Utility or MRES may terminate this Agreement

at any time upon thirty (30) days' written notice to the other Parties if the Qualifying Facility is not, or at any time ceases to be, a "qualifying facility" under PURPA; (c) any Party may terminate this Agreement after a default under Section 14 above; and (d) MRES may terminate this Agreement upon sixty (60) days' written notice to the other Parties in the event MRES determines that its purchase of electrical energy generated by the Qualifying Facility under Section 11 above would result in cost greater than those which MRES would incur if it did not make such purchases, as permitted by the PURPA waiver/agreement described in Recital D above. In the event this Agreement is terminated pursuant to subsection (d), Local Utility and Customer shall enter into a new agreement which defines their respective rights and obligations with respect to the interconnection and operation of the Qualifying Facility to and with the Local Utility System in accordance with PURPA.

- 16. Force Majeure. For purposes of this Agreement, a force majeure event is any event that is beyond the reasonable control of the affected Party and that the affected Party is unable to prevent by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: acts of war, terrorism, public disorder, rebellion or insurrection; floods, hurricanes, earthquakes, lightning, storms or other acts of God; explosions or fires; strikes, work stoppages or labor disputes; embargoes; and sabotage. If a force majeure event prevents a Party from fulfilling its duties under this Agreement, such Party shall promptly notify the other Party in writing and shall keep the other Party informed on a continuing basis of the scope and duration of the force majeure event. The affected Party shall specify the circumstances of the force majeure event, its expected duration, and the steps being taken to mitigate the effect of the event. The affected Party shall be entitled to suspend or modify its performance under this Agreement but will use reasonable efforts to resume its performance as soon as possible.
- 17. <u>Non-Warranty</u>. Neither by inspection, if any, nor by non-rejection or in any other way does Local Utility or MRES give or make any warranty, express or implied, as to the adequacy, safety or other characteristics of any lines, wires, switches, or other equipment or structures owned, installed or maintained by Customer.
- 18. <u>Assignment</u>. Customer may assign this Agreement to an entity or individual to whom Customer transfers ownership of the Qualifying Facility, so long as Customer obtains prior written consent of Local Utility and MRES, which consent shall not be unreasonably withheld, and such assignee agrees in writing to assume all obligations of Customer under this Agreement. Local Utility and/or MRES may assign this Agreement upon written notice to Customer.
- 19. <u>No Waiver</u>. The failure of a Party to insist, on any occasion, upon strict performance of any provision of this Agreement shall not be construed as a waiver or relinquishment of the obligations, rights or duties imposed upon the Parties.
- 20. <u>Notices</u>. Notices given under this Agreement shall be deemed to have been given when delivered in person or by mail, postage prepaid, to the respective addresses of the Parties set forth in the opening paragraph of this Agreement. Such addresses may be changed by written notification to the other Parties.

- 21. <u>Severability</u>. If any provision of this Agreement is adjudged by any court of competent jurisdiction to be illegal or unenforceable, such provision shall be deemed separate and independent, and the remainder of this Agreement shall remain in full force and effect.
- 22. Entire Agreement; Amendments. This Agreement, including the Interconnection Rules and all Exhibits hereto, constitutes the entire agreement and understanding between the Parties concerning the subject matter of this Agreement. The Parties are not bound by or liable for any statement, representation, promise, understanding or undertaking of any kind or nature, whether written or oral, with regard to the subject matter hereof not set forth or provided for herein. It is expressly acknowledged that the Parties may have other agreements covering other services not expressly provided for in this Agreement, which agreements are unaffected by this Agreement. This Agreement may be amended only upon mutual agreement of the Parties, which amendment will not be effective until reduced to writing and executed by the Parties.
- 23. <u>Dispute Resolution</u>. The city council or city-appointed body governing the Local Utility has authority to consider and determine disputes, if any, that arise under this Agreement. The Parties agree to use good faith efforts to resolve all disputes in accordance with the dispute resolution process adopted by the Local Utility's governing body pursuant to Minnesota Statutes §216B.164.
- 24. <u>Governing Law; Jurisdiction</u>. This Agreement and the rights and obligations of the Parties hereunder shall be construed in accordance with and shall be governed by the laws of the State of Minnesota.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused this Interconnection and Power Purchase Agreement $-100~\mathrm{kW}$ or Less (Standard Agreement) to be signed by their respective duly authorized representatives.

[LOCAL UTILITY NAME]	[CUSTOMER NAME]	
BY: TITLE: DATE:	BY: TITLE: DATE:	_
MISSOURI BASIN MUNICIPAL POWEI d/b/a MISSOURI RIVER ENERGY SERV		
BY: TITLE: DATE:		

EXHIBIT A INTERCONNECTION APPLICATION

EXHIBIT B METERING ARRANGEMENT AND PURCHASE RATE

purchased from the Qualifying Facility under Section 11 of the Agreement shall be equal to the MRES PURPA rate for 100 kW or less, as established by MRES in its sole discretion each year or upon other intervals as determined by MRES. The MRES PURPA rate for 100 kW or less for 20_ is \$/kWh. MRES shall notify Local Utility, and Local Utility shall notify Customer, of any change in such rate adopted by MRES. Customer's right to payments under Section 11 is subject to Customer's compliance with the terms, covenants and conditions of the Agreement.		
2. Loss Factor Adjustment. The MRES PURPA rate for 100 kW or less, as described in Section 1 above, shall be increased by a percentage factor to reflect the savings resulting from reduced Local Utility System losses associated with electrical energy purchased from the Qualifying Facility under Section 11 of the Agreement. For example, if the Loss Factor Adjustment was 5%, the Loss Factor Adjustment to the 20 MRES PURPA rate, in dollars, would be \$ (\$ x 0.05), causing the total combined rate paid for power purchased from the Qualifying Facility to be \$ /kWh. Local Utility and MRES shall establish the Loss Factor Adjustment each year or upon other intervals as they determine, and Local Utility shall notify Customer of any change in this factor. The Loss Factor Adjustment for 20 is%.		
3. <u>Metering Arrangement</u> .		
a. <u>Less than 40 kW QFs</u> . A customer with a Qualifying Facility with a capacity of less than 40 kW can elect one of the following metering arrangements to measure the electrical energy generated by the Qualifying Facility which is received by the Local Utility System for purchase by MRES (Customer to select one):		
Net Metering. The metering shall be such that power delivered to Customer by Local Utility shall be netted against power received by Local Utility from the Qualifying Facility, pursuant to Minnesota Rules § 7835.3300. Local Utility's monthly invoice to Customer will indicate: (a) a credit to Customer if the power receive by Local Utility from the Qualifying Facility exceeds the power provided by Local Utility to Customer or (b) the payment due by Customer to Local Utility if the power delivered by Local Utility to Customer exceeds the power received by Local Utility from the Qualifying Facility. The rate to be used to determine payment under subsection (a) for any net excess power received by the Local Utility System shall be the rate described in Section 11 of the Agreement.		
. <u>Dual Metering</u> . The metering shall be such that all power received by th Local Utility from the Qualifying Facility (net of Customer's own use) shall be measure separately from power delivered from Local Utility to Customer, pursuant to Minnesota Rules § 7835.3400. The meter measuring power delivered to Customer shall not permit		

reduction of measured power already delivered to Customer during periods when the Qualifying Facility generation exceeds Customer demand (i.e. no netting allowed). Local Utility shall credit Customer's monthly bill for power received by the Local Utility System and purchased by MRES. The rate paid by MRES for electrical energy generated by the Qualifying Facility which is received by the Local Utility System shall be the rate described in Section 11 of the Agreement.

- b. 40 kW to 100 kW QFs. If the capacity of Customer's Qualifying Facility is 40 kW or more and less than or equal to 100 kW, then the metering arrangement to measure the electrical energy generated by the Qualifying Facility which is received by the Local Utility System for purchase by MRES shall be such that all power received by the Local Utility from the Qualifying Facility (net of Customer's own use) shall be measured separately from power delivered from Local Utility to Customer, pursuant to Minnesota Rules § 7835.3400. The meter measuring power delivered to Customer shall not permit reduction of measured power already delivered to Customer during periods when the Qualifying Facility generation exceeds Customer demand (i.e. no netting allowed). Local Utility shall credit Customer's monthly bill for power received by the Local Utility System and purchased by MRES. The rate paid by MRES for electrical energy generated by the Qualifying Facility which is received by the Local Utility System shall be the rate described in Section 11 of the Agreement.
- c. Customer acknowledges and agrees that time-of-day purchase rates under Minnesota Rules § 7835.3500 are not available under this Agreement due to metering and technology limitations of Local Utility and Customer.
- 4. <u>Environmental Attributes</u>. Power purchased by MRES from the Qualifying Facility does not include any environmental attributes (i.e., renewable energy credits), if any, associated with the environmental character of the Qualifying Facility, nor any federal income tax credits for renewable energy that are accruable to Customer with respect to the Qualifying Facility.

	<u>Interconnection Costs</u> . The Qualifying Facility is responses of interconnection which are estimated to be \$ pay Local Utility as follows:	
6.	Metering Equipment. Local Utility is responsible for	•
U 1	t responsibility, if any, associated with the metering equ	. Local ipment is as follows:

Schedule E

(Rule 7835.0800)

Interconnection Agreement

Schedule E must contain the utility's safety standards, required operating procedures for interconnected operations, and the functions to be performed by any control and protective apparatus. These standards and procedures must not be more restrictive than the standards contained in the electrical code under part 7835.2100 or the interconnection standards distributed to customers under part 7835.4750. The utility may include in schedule E suggested types of equipment to perform the specified functions. No standard or procedure may be established to discourage cogeneration or small power production.

INTERCONNECTION AGREEMENT

For use in lieu of the MN Standard Agreement

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i. Contact Information

Contact information for each Party is listed below along with the basic information describing the Distributed Energy Resource (DER) system.

Area EPS Operator Information	
Area EPS Operator:	
Attention:	
Address:	
Phone:	
Email:	
Interconnection Customer Info	
Interconnection Customer:	
Attention:	
Address:	
_	
Phone:	
Email: _	
DER System Information	
Application Number	er:
Type of DER Syster	n:
Capacity Rating of System (AC	C):
Limited Capacity Rating (AC	z):
Address of DER System	m:

This Interconnection Agreer	ment ("Agreement") is mad	de and entered into this	_ day
of, 20k	oy and between		
("Interconnection Customer	~"), and		, a
municipal utility existing un	der the laws of the State of	Minnesota ("Area EPS Opera	ator").
Interconnection Customer a	and Area EPS Operator eacl	n may be referred to as a "Pai	rty" or
collectively as the "Parties."	,		

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

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 shown in the one-line diagram in Attachment 3.
- 1.2. This Agreement shall be used for all Interconnection Applications submitted under the Minnesota Interconnection Process (MIP) except for those Interconnection Applications that qualify and choose for the MN Standard Agreement 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 MIP, 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 from the Area EPS Operator, or others, may be covered under separate agreements.
- 1.6. To facilitate the operation of the Distributed Energy Resource, this Agreement also allows for the occasional and inadvertent export of energy to the Area EPS. The amount, metering, billing, and accounting of such inadvertent energy exporting shall be governed by the Operating Agreement in Attachment 5. This Agreement does not constitute an agreement by the Area EPS Operator to purchase or to pay for any energy, inadvertently or intentionally exported, unless expressly noted in Attachment 5 or under a separately executed power purchase agreement (PPA).

- 1.7. This Agreement does not constitute a request for the provision of any transmission delivery service or for any local distribution delivery service. If it is the Interconnection Customer's intent to sell to other parties, the Interconnection Customer shall be responsible for market related charges to the Area EPS Operator or its wholesale power supplier caused by the generator operation.
- 1.8. 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 is incorporated and made part of this Agreement by this reference.
- 1.9. Nothing in this Agreement is intended to affect any other agreement between the Area EPS Operator and the Interconnection Customer.

2 Responsibilities of the Parties

- 2.1. The Parties shall perform all obligations of this Agreement in accordance with the MIP, Minnesota Technical Requirements, all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.
- 2.2. 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, this Agreement, and Good Utility Practice. Prior to the construction of the Distributed Energy Resource, the Interconnection Customer shall obtain all environmental and other permits required by any governmental authorities. The Interconnection Customer shall also maintain and comply with the requirements of these permits during the term of this Agreement.
- 2.3. The Area EPS Operator shall construct, operate, and maintain its Distribution System and its Interconnection Facilities in accordance with this Agreement and Good Utility Practice.
- 2.4. The Parties agree to cause their facilities or systems to be constructed in accordance with the laws of the State of Minnesota and to meet or exceed applicable codes and standards provided by the National Electrical Safety Code, the American National Standards Institute, Institute of Electrical and Electronics Engineers (IEEE), Underwriter's Laboratory (UL), Minnesota Technical Requirements, Operating Requirements, and local building codes and other applicable ordinances in effect at the time of construction. 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.
- 2.5. 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.
- 2.6. The Area EPS Operator shall coordinate with all Affected Systems to support the interconnection.

3 Parallel Operation Obligations

3.1. 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 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.

4 Metering

4.1. As described in MIP Process Overview Section 9.1, 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.

5 Distributed Energy Resource Capabilities and Grid Reliability

5.1. 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.
- 5.2. 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 MIP).

6 Equipment Testing and Inspection

6.1. As described in MIP Process Overview Section 9.2, 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.

7 Authorization Required Prior to Parallel Operation

7.1. As described in MIP Process Overview Section 9.4, the Area EPS Operator shall use Reasonable Efforts to list applicable parallel operation requirements by providing the Minnesota Technical Requirements with the notice of approval of the Interconnection Application or by providing a website link to the document. 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 MIP Process Overview Section 9.5, 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.

8 Right of Access

- 8.1. 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 (3) Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Area EPS Operator at least five (5) Business Days prior to conducting any on-site verification testing of the Distributed Energy Resource.
- 8.2. 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.
- 8.3. Each Party shall be responsible for its costs associated with the interconnection of the DER system as outlined in MIP Process Overview Section 9.3 and the Minnesota Technical Requirements.

9 Term and Termination

- 9.1. This Agreement shall become effective as of the date when both the Interconnection Customer and the Area EPS Operator have both signed this Agreement. The Agreement shall continue in full force and effect until the earliest date that one of the following events occurs:
 - 9.1.1. The Parties agree in writing to terminate the Agreement;
 - 9.1.2. The Interconnection Customer may terminate this Agreement at any time by giving the Area EPS Operator twenty (20) Business Days written notice;
 - 9.1.3. The Area EPS Operator may terminate this Agreement if the Distributed Energy Resource is not interconnected to the Area EPS Operator's Distribution System within thirty-six (36) months of the effective date of this Agreement as set forth above in Section 9.1;
 - 9.1.4. Either Party may terminate this Agreement after default pursuant to Section 19.
- 9.2. No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination.
- 9.3. 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 Agreement or such non-terminating Party otherwise is responsible for these costs under this Agreement.
- 9.4. The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing, at the time of the termination.

9.5. The provisions of this Section 9 shall survive termination or expiration of this Agreement.

10 Disconnection

- 10.1. Disconnection of Unit. The Area EPS Operator may disconnect the Distributed Energy Resource as reasonably necessary, including for the following conditions or situations: termination of this Agreement, non-compliance with this Agreement, a system emergency, imminent danger to the public or Area EPS personnel, or for routine maintenance, repairs, and modifications to the Area EPS. The Area EPS Operator shall use Reasonable Efforts to notify the Interconnection Customer promptly when it becomes aware of an event or 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 event or 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 event or 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. It is agreed that the Area EPS Operator shall have no liability for any loss of sales or other damages including all consequential damages for the loss of business opportunity, profits or other losses, regardless of whether such damages were foreseeable, due to the disconnection of the Distributed Energy Resource.
- 10.2. <u>Temporary Interruption.</u> 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 (3) 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. Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.
- 10.3. <u>Forced Outage.</u> 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 reasonably possible, the Area EPS Operator shall, upon request, provide the Interconnection Customer

- written documentation after the fact explaining the circumstances of the disconnection.
- 10.4. 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 (5) Business Days' notice of such disconnection, unless the provisions of Section 10.1 apply.
- 10.5. 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 Section 7 of the MIP Process Overview. If the Interconnection Customer makes such modification without the Area EPS Operator's prior written authorization, the Area EPS Operator shall have the right to temporarily disconnect the Distributed Energy Resource.
- 10.6. <u>Reconnection.</u> 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.
- 10.7. <u>Treatment Similar to Other Retail Customers.</u> 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.
- 10.8. <u>Disconnection for Default.</u> If the Interconnection Customer is in default of this Agreement, it may be disconnected after a sixty (60) day written notice is provided and the default is not cured during this sixty (60) day notice. This provision does not apply to disconnection based on Sections 10.1, 10.2, 10.3 or 10.4 of this Agreement.

11 Cost Responsibility for Interconnection Facilities and Distribution Upgrades

- 11.1 <u>Interconnection Facilities.</u> The Interconnection Customer shall pay for the actual cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Area EPS Operator shall provide a good faith estimate of the 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.
- 11.2 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.
- 11.3 <u>Distribution Upgrades.</u> The Area EPS Operator shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 7 of this Agreement. The Area EPS Operator shall provide a good faith estimate of the 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.

12 Cost Responsibility for Network Upgrades

- 12.1. <u>Applicability.</u> No portion of Section 12 shall apply unless the interconnection of the Distributed Energy Resource requires Network Upgrades.
- 12.2. Network Upgrades. The Area EPS Operator or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 7 of this Agreement. The Area EPS Operator shall provide a good faith estimate of the 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.
- 12.3. 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 the Federal Energy Regulatory Commission's (FERC) 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.
- 12.4. 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.
- 12.5. 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, the Area EPS Operator and Affected System operator 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.

- 12.6. <u>Special Provisions for Affected Systems.</u> 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.
- 12.7. 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.

13 Billing, Payment, Milestones, and Financial Security

- 13.1. <u>Billing and Payment Procedures and Final Accounting.</u> 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 each bill, pursuant to the MIP Interconnection Process documents, or as otherwise agreed to by the Parties.
- 13.2. 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 MIP Fast Track Process Section 9.5.3 and the Study Process Section 11.4.3.
- 13.3. <u>Milestones.</u> Pursuant to the MIP Fast Track Process Section 9.1 and the Study Process Section 11.1, the Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement.
- 13.4. <u>Financial Security Arrangements.</u> Pursuant to the MIP Fast Track Process Section 9.6 and the Study Process Section 11.5, 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:

- 13.4.1. 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.
- 13.4.2. 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 not sooner than sixty (60) Business Days (three calendar months) after the due date for the issuance of the final bill.

14 Assignment

14.1. The Interconnection Customer shall not assign its rights nor delegate its duties under this Agreement without the prior written consent of the Area EPS Operator. Any assignment or delegation made by the Interconnection Customer without the Area EPS Operator's written consent shall not be valid. The Area EPS Operator shall not unreasonably withhold its consent to the Interconnection Customer's assignment or delegation under this Agreement.

15 Limitations of Liability

- 15.1. Each Party's liability to the other Party for failure to perform its obligations under 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 of any kind whatsoever, including for loss of business opportunity or profits, regardless of whether such damages were foreseen.
- 15.2. Notwithstanding any other provision in this Agreement, with respect to the Area EPS Operator's provision of electric service to any customer including the Interconnection Customer, the Area EPS Operator's liability to such customer shall be limited as set forth in the Area EPS Operator's tariffs and terms and conditions for electric service, and shall not be affected by the terms of this Agreement.

16 Non-Warranty

16.1. 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 or leased by the Interconnection Customer from third parties, 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.

17 Indemnity

- 17.1. 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 Section 15.
- 17.2. Each Party 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 or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, reasonable attorney fees, and all other obligations by or to third parties, arising out of or resulting from the Party's action or failure to meet its obligations under this Agreement, except to the extent that such damages, losses or claims were caused by the negligence or intentional acts of the other Party.
- 17.3. If an indemnified Party 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 Party 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.
- 17.4. If an indemnifying Party is obligated to indemnify and hold any indemnified Party harmless under this article, the amount owing to the indemnified Party shall be the amount of such indemnified Party's actual loss, net of any insurance or other recovery.
- 17.5. Promptly after receipt by an indemnified Party of any claim or notice of the commencement of any action, administrative or legal proceeding, or investigation as to which the indemnity provided for in this article may apply, the indemnified Party 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.

18 Force Majeure

18.1. 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 of obligations under this Agreement as soon as possible.

19 Default

- 19.1. No default of any obligation under this Agreement 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 Section 18, the defaulting Party shall have sixty (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 sixty (60) calendar days, the defaulting Party shall commence such cure within twenty (20) calendar days after notice and continuously and diligently complete such cure within six (6) months from receipt of the default notice; and, if cured within such time, the default specified in such notice shall cease to exist.
- 19.2. If a default is not cured as provided in this Section 19, 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 Section 19 will survive termination of this Agreement.

20 Insurance

20.1. An Area EPS Operator may only require an Interconnection Customer to purchase insurance covering damages pursuant to the applicable MIP process document to which the Distributed Energy Resource is subject to.

- 20.2. 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.
- 20.3. 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.
- 20.4. 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.

21 Confidential Information

21.1. Each Party shall treat and protect Confidential Information under this Agreement in accordance with the Confidentiality provisions in the MIP Process Overview document Section 12.1.

22 Disputes

22.1. The Parties agree to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner. The Parties agree to follow the established dispute resolution policy adopted by the Area EPS Operator.

23 Taxes

- 23.1. 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.
- 23.2. 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 deadlines 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.

24 Miscellaneous

24.1. <u>Governing Law, Regulatory Authority, and Rules.</u> This Agreement shall be interpreted, governed, and construed under 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.
- 24.2. <u>Amendment.</u> The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under Section 24.11 of this Agreement.
- 24.3. <u>No Third-Party Beneficiaries.</u> 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.
- 24.4. <u>Waiver</u>. None of the provisions of this Agreement shall be considered waived by a Party unless such waiver is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any of the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishment of any such rights for the future, but the same shall continue and remain in full force and effect.
- 24.5. Entire Agreement. This Agreement, including all attachments, constitutes the entire agreement between the Parties with regard to the interconnection of the Distributed Energy Resource of the Parties at the Point(s) of Common Coupling expressly provided for in this Agreement and supersedes all prior agreements or understandings, whether verbal or written. It is expressly acknowledged that the Parties may have other agreements covering other services not expressly provided for herein, which agreements are unaffected by this Agreement. Each Party also represents that in entering into this Agreement, it has not relied on the promise, inducement, representation, warranty, agreement, or other statement not set forth in this Agreement or in the incorporated attachments.
- 24.6. <u>Multiple Counterparts.</u> 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.
- 24.7. <u>No Partnership.</u> 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.

- 24.8. <u>Severability.</u> 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.
- 24.9. 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.
- 24.10. <u>Subcontractors.</u> 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. 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.
 - 24.10.1. 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. 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.
 - 24.10.2. The obligations under this Section 24 will not be limited in any way by any limitation of subcontractor's insurance.
- 24.11. <u>Inclusion of Area EPS Operator Tariff and Rules.</u> The interconnection services provided under this Agreement shall at all times be subject to the terms and conditions set forth in the rate schedules and rules applicable to the electric service provided by the Area

EPS Operator, which rate 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 change its rates, charges, classification, service, tariff, or rule, or any agreement relating thereto subject to standard municipal procedures as determined by the appropriate governing board.

25 Notices

25.1. <u>General.</u> 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 or sent by United States Mail, first class, postage prepaid, to the person specified as follows:

Area EPS Operator Information	<u>on</u>
Area EPS Operator:	
Attention:	
Address:	
Phone:	
Email:	
Interconnection Customer In	<u>formation</u>
Interconnection Customer:	
Attention:	
Address:	
-	
Phone:	
Phone: - Email:	

25.2. <u>Billing and Payment.</u> B	illing and payments shall be sent to the addresses set out below:
Area EPS Operator Informat	<u>ion</u>
Area EPS Operator:	
Attention:	
Address:	
Phone:	
Email:	
•	
Interconnection Customer I	<u>nformation</u>
Interconnection Customer:	
Attention:	
Address:	
Phone:	
Email:	
either Party to the oth	lotice. Any notice or request required or permitted to be given by er and not required by this Agreement to be given in writing may ne or email to the telephone numbers and e-mail addresses set
Area EPS Operator Information	on
Area EPS Operator:	
Attention:	
Address:	
Phone:	
Email:	
•	

Interconnection Customer In	<u>formation</u>
Interconnection Customer:	
Attention:	
Address:	
Phone:	
Email:	
·	Representative. The Parties may also designate operating
·	duct the communications which may be necessary or convenient
	of this Agreement. This person will also serve as the point of
contact with respect to	o operations and maintenance of the Party's facilities.
Area EPS Operator Information	
Area EPS Operator:	<u>.</u>
Attention:	
Address:	
Phone:	
Email:	
Interconnection Customer Info	<u>rmation</u>
Interconnection Customer:	
Attention:	
Address:	
Phone:	
Email:	
•	
25.5 Changes to Notification	n Fither Party may change this information by giving five

25.5. <u>Changes to Notification.</u> 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.

26 Signatures

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of Area EPS Operator]	[Insert name of Interconnection Customer]
Signed:	Signed:
Name (Printed):	Name (Printed):
 Title:	Title:

Attachment I: Glossary of Terms

Affected System – Another Area EPS Operator's System, 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. For this Interconnection Process the Area EPS Operator is [NAME OF UTILITY]

Business Day – Monday through Friday, excluding Holidays as defined by Minn. Stat. §645.44, Subdivision 5. Any communication to have been sent or received after 4:30 p.m. Central Prevailing Time or on a Saturday, Sunday or holiday shall be considered to have been sent on the next Business Day.

Certified Equipment – Certified equipment is equipment that has been tested by a national recognized lab meeting a specific standard. For DER systems, UL 1741 listing is a common form of DER inverter certification. Additional information is seen in the Certification Codes and Standards document.

Confidential Information – Any confidential and/or proprietary information provided by one Party to the other Party and is clearly marked or otherwise designated "Confidential." All procedures, design, operating specifications, and metering data provided by the Interconnection Customer may be deemed Confidential Information. See MIP Process Overview Section 12.1 for further information.

Distributed Energy Resource (DER) – A source of electric power that is not directly connected to a bulk power system or central station service. 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 Interconnection Process and interconnection agreements, 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 affect the Interconnection Customer's connection to the Distribution System. Distribution Upgrades do not include Interconnection Facilities.

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

Fast Track Process – The procedure as described in the Interconnection Process - Fast Track Process for evaluating an Interconnection Application for a DER that meets the eligibility requirements in the MIP Process Overview Section 3.4.

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 utility's local governing body 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 Section 8 in the MIP Process Overview for when the MN Standard Agreement or MN Interconnection Agreement applies.

Interconnection Application – The Interconnection Customer's request to interconnect a new or modified, as described in Section 4 of the MIP Process Overview, DER. See Simplified Application Form and 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 DER(s) is designed, operated and maintained in compliance with the Minnesota Technical Requirements.

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 DER and the Point of Common Coupling, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the DER 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.

Interconnection Process – The Area EPS Operator's interconnection standards as part of the DG Workbook - MN.

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

Minnesota Technical Requirements – This term refers to the Technical Specifications Manual adopted by the Area EPS Operator (Chapter 8 of the DG Workbook – MN) and the Minnesota Technical Interconnection and Interoperability Requirements approved by the Minnesota Public Utilities Commission in Docket No. E-999/CI-16-521.

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

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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 a 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 in a way that is likely to have an impact on technical review.

Local EPS with multiple DER units, the aggregate nameplate rating is equal to the sum of all DERs nameplate rating in the Local EPS. For purposes of Attachment V to the Interconnection Agreement, the DER system's capacity may, with the Area EPS's agreement, be limited thought use of control systems, power relays or similar device settings or adjustments as identified in IEEE 1547. The nameplate ratings referenced in the Interconnection Process are alternating current nameplate DER ratings at the Point of DER Coupling.

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.

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 the Interconnection 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.

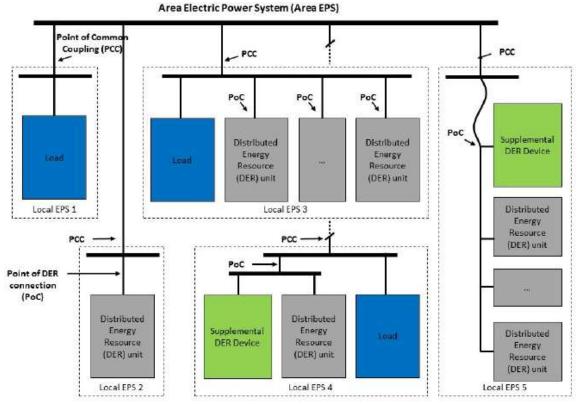


Figure 1: Point of Common Coupling and Point of DER Connection

(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 Section 4.7 of the MIP Process Overview.

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 Technical 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 the Interconnection Process – Simplified Process document. The Simplified Process includes simplified procedures.

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

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 Minnesota Public Utilities 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.

MN Standard Agreement – the Area EPS Operator's Interconnection and Power Purchase Agreement that may be applied to all qualifying new and existing interconnections between the Area EPS Operator and an DER system having capacity of 100 kW or less.

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.

Attachment II: Description and Costs of the Distributed Energy Resource, Interconnection Facilities, and Metering Equipment

Equipment, including the Distribution 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 the Interconnection Facilities and metering equipment.

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

Attach the one-line diagram of the Distributed Energy Resource, Interconnection Facilities, Metering Equipment, and Upgrades to which this Agreement applies.

Attachment IV: Milestones

The Milestones in line (1) below may be a calendar date. All other dates in this Attachment IV may be the number of Business Days from the calendar date in line (1) or from the completion of a different Milestone described in a specific number line. 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: _____

ritical miles	tones and responsibilities as agreed to by the Pa	rties:
	Milestone/Anticipated Date	Responsible Party
(1)		
(2)		
(3)		
4)		
5)		
6)		
7)		
8)		
9)		
0)		
1)		
.2)		
.3)		

Agreed to by:		
Area EPS Operator	Date	
Transmission Owner (If Applicable)	Date	
Interconnection		
Customer	Date	

Attachment V: Operating Agreement

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. Each Distributed Energy Resource interconnection will be unique and will require a unique Operating Agreement. The following is a listing of some of the possible areas that will be covered in an operating agreement. The following has not been developed into a standard agreement due to the unique nature of each Distributed Energy Resource. It is envisioned that this Attachment will be tailored by the Area EPS Operator for each Distributed Energy Resource interconnection. It is also intended that this Operating Agreement Attachment will be reviewed and updated periodically to allow the operation of the Distributed Energy Resource to change to meet the needs of both the Area EPS Operator and the Interconnection Customer. There may also be operating changes required by outside parties or influences, such as changes in FERC and regional transmission organization requirements and/or policy changes which will require this Operating Agreement to be modified.

The following items are provided to show the general types of items that may be included in this Operating Agreement. The list of items is not all-inclusive and is not meant to preclude any other issues that may be addressed in the Operating Agreement.

- A. <u>Applicable Area EPS Tariffs</u> Identify which tariffs are being applied for and how the tariffs would be applicable to this installation.
- B. <u>Var Requirements</u> Sufficient power factor correction and control devices shall be furnished on the Distributed Energy Resource system such that a 98% power factor, minimum, is maintained across the point of interconnection at all times. Sufficient power factor correction and control devices shall be furnished on the Distributed Energy Resource system to provide the capability of unity power factor across the point of interconnection when operating at full generation output capacity. The Distributed Energy Resource shall be set up to attempt to maintain unity power factor at all times during operation.

C. Metering Arrangement

- 1. The project will be adequately metered, with metering that is approved by the Area EPS Operator. The meter will be a bi-directional meter capable of metering the energy and power coming from the Distributed Energy Resource or capable of being furnished to the generator. The project and the Interconnection Customer will comply with the standards set out in the MN Interconnection Process.
- 2. The Area EPS Operator shall provide Missouri River Energy Services (MRES) metering data for inadvertent energy received by the Area EPS on the Area EPS Operator's monthly billing cycle. The metering data shall be made available to MRES no later than

ten days after the end of the monthly billing cycle. The Area EPS Operator shall test the metering equipment on a scheduled basis. If the metering equipment fails to register proper amounts or the registration thereof becomes so erratic as to be meaningless, the inadvertent energy shall be determined by the Area EPS Operator from the best information available.

- D. Inadvertent Energy MRES shall purchase all inadvertent energy supplied by the Distributed Energy Resource which is received by the Area EPS. The rate paid by MRES for the inadvertent energy will be equal to the commensurate real-time hourly locational marginal price (LMP) as settled by the Midcontinent Independent System Operator (MISO) or Southwest Power Pool (SPP) for the commercial pricing node [identify node] located at or near to [name of local utility], for the hours during which inadvertent energy was received by the Area EPS, less any administrative costs charged by MISO, SPP or other utilities with respect to the sale or transfer of such energy. The Interconnection Customer acknowledges and agrees that the hourly LMP rate fluctuates based upon the supply and demand for energy within the MISO or SPP market as determined by MISO or SPP, and that it is possible that the LMP price at times may be negative, meaning that the Interconnection Customer may have to make (rather than receive) payment for inadvertent energy received by the Area EPS. The Interconnection Customer shall receive payment for the inadvertent energy to MRES through a credit on the Interconnection Customer's monthly invoice from the Area EPS Operator. MRES, in turn, shall credit the monthly wholesale power supply bill submitted by MRES to the Area EPS Operator in an amount equal to the purchases of inadvertent energy during the preceding month. The Area EPS Operator shall provide to MRES, as soon as available following the end of each month, data indicating the amount of inadvertent energy purchased by MRES from the Interconnection Customer's generation during the preceding month.
- E. <u>Control Issues</u> Starting and stopping of the generation, including the remote starting and stopping, if applicable.
- F. <u>Dispatch of Distributed Energy Resources</u> What are the dispatch requirements for the Distributed Energy Resource; can it only run during Peak Hours? Are there a limited number of hours that it can run? Is it required to meet an availability percentage? The answer to these questions will depend greatly upon the PPA and other requirements. Is the Interconnection Customer required to coordinate outages of the Distributed Energy Resource with the Area EPS? Prior to any planned outage and following an unplanned outage, the Area EPS and MRES shall be notified in a timely manner.
- G. <u>Outages of Distribution System</u> How are emergency outages handled? How are other outages scheduled? If the Interconnection Customer requires the Area EPS Operator to schedule the outages during after-hours, who pays for the Area EPS Operator's overtime?

- H. <u>Notification/Contacts</u> Who should be notified? How should they be notified? When should they be notified? For what reasons should the notification take place?
 - 1. Starting of the generation
 - 2. Dispatching of generation
 - 3. Notification of failures (both Area EPS and Distributed Energy Resource failures)
- I. <u>Documentation of Operational Settings</u> How much fuel will the generation system typically have on hand? How long can it run with this fuel capacity? How is the generation system set to operate for a power failure? These may be issues documented in the Operating Agreement. The following are examples of what may be documented:
 - 1. The Distributed Energy Resource will monitor the Area EPS phase voltage and after 2 seconds of any phase voltage below 90%, the generation will be started and the load transferred to the generator, if the generation is not already running.
 - 2. The Distributed Energy Resource will wait for 30 minutes after it senses the return of the Area EPS frequency and voltage before it will automatically reconnect to the Area EPS.
- J. <u>Cost of Testing for Future Failures</u> If a failure of a component of the Distributed Energy Resource affects the interconnection with the Area EPS, what is the process for retesting, and for replacement? Who pays for the additional costs of the Area EPS to work with the Interconnection Customer to resolve these problems and/or to complete retesting of the modified equipment?
- K. <u>Right of Access</u> At all times, the Area EPS Operator shall have access to the disconnect switch of the Distributed Energy Resource for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement, to meet its obligation to operate the Area EPS safely, and to provide service to its customers. If necessary for the purpose of this Agreement, the Interconnection Customer shall allow the Area EPS Operator access to the Area EPS's equipment and facilities located on the premises.
- L. <u>Power Quality</u> The installation shall be constructed and operated to ensure that the Area EPS Operator's Distribution System is not adversely affected by power quality issues which may be caused by the Distributed Energy Resource, including voltage flicker. The Distributed Energy Resource shall be equipped with devices which serve to minimize power quality disturbances, including soft starting controls to minimize inrush currents and control devices to prevent multiple units from starting simultaneously.

SIGNATURES

IN WITNESS WHEREOF, the Parties hereto have caused three originals of this Agreement to be executed by their duly authorized representatives. This Agreement is effective as of the last date set forth below.

Ву:
Name:
Title:
Date:
Area EPS Operator
Ву:
Name:
Title:
Date:
Missouri River Energy Services
Ву:
Name:
Title:
Date:

Interconnection Customer

Attachment VI: Maintenance Agreement

Each Distributed Energy Resource interconnection will be unique and will require a unique Maintenance Agreement. This Maintenance Agreement will be tailored for each Distributed Energy Resource interconnection. It is also intended that this Maintenance Agreement will be reviewed and updated periodically to allow changes to meet the needs of both the Area EPS Operator and the Interconnection Customer (provided the change does not negatively affect the other Party). There may also be changes required by outside parties and influences such as changes in FERC or MISO/SPP requirements and/or policies which will require this Agreement to be modified.

- A. Routine Maintenance Requirements
 - 1. Who is providing maintenance Contact information
 - 2. Periods of maintenance
- B. Modifications to the Distributed Energy Resource The Interconnection Customer shall notify the Area EPS Operator, in writing, of plans for any modifications to the Distributed Energy Resource interconnection equipment at least twenty (20) business days prior to undertaking such modification. Modifications to any of the interconnection equipment, including all required protective systems, the generation control systems, the transfer switches/breakers, VTs & CTs, generating capacity, and associated wiring, shall be included in the notification to the Area EPS Operator. The Interconnection Customer agrees not to commence installation of any modifications to the Distributed Energy Resource until the Area EPS Operator has approved the modification in writing. The Area EPS shall have ten (10) business days to review and respond to the modification after receipt of the information required for review of the modifications.

SIGNATURES

IN WITNESS WHEREOF, the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives. This Agreement is effective as of the last date set forth below.

Interconnection Customer	Area EPS Operator
Ву:	Ву:
Name:	Name:
Title:	Title:
Date:	Date:

Attachment VII: Area EPS Operator's Description of Distribution and Network Upgrades and Good Faith Estimates of Upgrade Costs

The Area EPS Operator shall describe Distribution and Network Upgrades and provide an itemized good faith estimate of the costs, including administrative overheads, of the Upgrade and annual operations 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 Section 12.6 of the MN Interconnection Agreement.

Attachment VIII: Assignment of Interconnection Agreement

This Assignment of Interconnection Agreement ("Assignment") is made and entered into
nis day of,, by and between, a
nunicipal utility existing under the laws of the State of Minnesota ("Area EPS Operator"),
("Assignor"), and ("Assignee").
WHEREAS, the Area EPS Operator and Assignor previously entered into an
nterconnection Agreement ("Agreement") dated as of,, including any and all
ttachments and amendments thereto, for a Distributed Energy Resource (DER) described as
ollows:
ER System Information
Type of DER System:
Capacity Rating of System (AC):
Limited Capacity Rating (AC):
Address of DER System:
WHEREAS, the Assignor intends to convey its interest in the above-referenced DER to

WHEREAS, the Assignor intends to convey its interest in the above-referenced DER to the Assignee, and the Assignor intends to assign its rights and obligations under the Agreement to the Assignee.

NOW THEREFORE, in consideration of the mutual undertakings herein contained, the Assignor, the Assignee, and the Area EPS Operator agree as follows:

- **1. Capitalized Terms**. Capitalized terms used but not defined herein shall have the meanings set forth in the Agreement.
- 2. Consent to Assignment. The Assignor hereby irrevocably assigns the Agreement in all respects to the Assignee and the Assignee accepts the assignment thereof in all respects.
- **3.** Amendment to Agreement. The Area EPS Operator consents to this assignment and, as assigned, the Agreement is hereby amended so that wherever the name of the Assignor

is used therein it shall mean the Assignee. It is further agreed that all terms and conditions of the Agreement, as amended by this Assignment, shall remain in full force and effect.

- **4. Payments by Area EPS Operator**. Any and all payments made by Area EPS Operator under the Agreement to either the Assignor or the Assignee shall be deemed to have been made to both and shall discharge the Area EPS Operator from any further liability with regard to said payment.
- 5. Financial Obligations of Assignor and Assignee. Any and all financial liability, including but not limited to amounts due, from the Interconnection Customer to the Area EPS Operator, occurring or accruing under the Agreement on or before the date of the signature of the Area EPS Operator to this Assignment shall be deemed to be the obligation of both the Assignor and Assignee, and the Area EPS Operator may recover any such amounts jointly and severally from the Assignor and Assignee.
- **6. Contact information**. The following information updates and replaces the designated information as set forth on page 1 of the Agreement, and in Section 25.1, 25.2, 25.3 and 25.4 of the Agreement.

Page 1 Interconnection Customer Information

Interconnection Customer:	
Attention:	
Address:	
Phone:	
Email:	
25.1 General Notices. Intercon	nnection Customer Information
Attention:	
Address:	
Phone:	

23.2 Billing and Layment Hotel	ces. Interconnection Customer Information
Interconnection Customer:	
Attention:	
Address:	
Phone:	
Email:	
25.3 Alternative Forms of Not Interconnection Customer:	ices. Interconnection Customer Information
Attention:	
Address:	
Phone:	
riione.	
Email:	
Email:	presentative. Interconnection Customer Information
Email: 25.4 Designated Operating Re	presentative. Interconnection Customer Information
Email: 25.4 Designated Operating Re- Interconnection Customer:	presentative. Interconnection Customer Information
Email: 25.4 Designated Operating Results Interconnection Customer: Attention:	presentative. Interconnection Customer Information
Email: 25.4 Designated Operating Results Interconnection Customer: Attention:	presentative. Interconnection Customer Information

7. Signatures. Facsimile or electronic signatures, or signatures to this Assignment sent electronically, shall have the same effect as original signatures. Photocopies, or electronically stored versions of this Assignment, shall have the same validity as the original.

dates set forth below.	
Assignor	
[Insert legal name of Assignor]	
Signed:	
Name (Printed):	
Title:	
Date:	
Assigned	
Assignee	
[Insert legal name of Assignee]	
Signed:	
Name (Printed):	
Title:	
Date:	-
Area EPS Operator	
[Insert legal name of Area EPS Operator]	
[Insert regarmanie of Area Er 3 Operator]	
Signed:	
Name (Printed):	
Title:	
Date:	

The Area EPS Operator, Assignor, and Assignee have executed this Assignment as of the

Schedule F

Rule 7835.0900

Procedure for notifying Qualifying Facilities of periods when the utility will not purchase electric energy or capacity due to operational circumstances that would make the cost of purchases during those periods greater than the cost of internal generation.

Moorhead Public Service currently does not have any periods when the utility will not purchase electric energy or capacity due to operational circumstances that would make the cost of purchases during those periods greater than the cost of internal generation.

Minnesota Public Utilities Commission DOCKET NO. E999/PR-24-09 Reporting Year: 202 **Cogeneration and Small Power Production Tariff Utility**: Moorhead Public Service Minn. Rules 7835.1000 Schedule G: Computations and Descriptions

Schedule G must contain and describe all computations made by the utility in determining Schedules A and B. Please use the space below to show your calculations. Refer to Minn. Rules 7835.0500-7835.0600 for detailed computation descriptions, especially for Schedule B Subp. 5 and 6.

In Schedule A, MRES estimated the avoided energy cost by first calculating the total cost for the previous year assuming MRES purchased all energy to supply its member load from the MISO market on an hourly basis, at the real-time LMP. The total cost was then divided by the total energy requirement resulting in an historic load-weighted \$/MWh costs.

After calculating this historic avoided energy cost, MRES then applied forecasted LMP growth rates which were calculated from a LMP forecast conducted by Energy Ventures Analysis Incorporated (EVA). These estimates were then broken down by Summer and Winter seasons based on MISO's definitions for Fall, Winter, Spring, and Summer, and then the estimates were broken down by MISO's definition of on and off peak hours.

All values in Schedule A had applied one-half of the transmission and distribution loss factor as shown in Schedule B, Subp. 4.

In Subp. 3, all existing and PPA amounts and prices were listed for the next 10 years.

In Subp. 4, the loss amounts for distribution and transmissions was assumed to be 8% for all seasons.

In Subp. 5, the calculations are shown in the tables below. This section shows the total purchase price for all executed and future PPAs listed in Schedule B, Subp 3. The costs for the generation and costs for PPAs are added together to get an annual total dollar amount. These numbers were divided by PPA kW values, to get an annual cost per kW year. This series of numbers is converted to current dollars using a 6% discount rate, and then averaged to get a single cost / kW-yr. This number is then divided by 8,760 to get a \$/kwh for all hous, and also divided by 4,080 on-peak hours to get a \$/kWh for on-peak hours.

Calculation for Schedule B, Supb. 5

	Total Purchase Price for PPAs									
Purchase	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
[TRADE SECRET DATA BEGINS										
Total		\$ - \$	- \$	- \$	- \$	- \$	- \$	- TRA	DE SECRET DAT	A ENDS]
	Purchase kW									
Purchase	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
[TRADE SECRET DATA BEGINS	25,000	25,000	50,000	50,000	50,000	50,000	50,000	50,000		
	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000
	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000		
	3,300	3,300	3,300	3,300	3,300	3,300	3,300			
TRADE SECRET DATA ENDS]	22,000	22,000	22,000	22,000	22,000	22,000	22,000			
Total	141,300	141,300	166,300	166,300	166,300	166,300	166,300	141,000	65,000	65,000
	\$/kW-yr									
	\$ 46.09	\$ 46.30 \$	46.29 \$	46.47 \$	46.66 \$	46.84 \$	47.02 \$	45.55 \$	47.40 \$	47.40
	Present Value in 2	2023 dollars								
	\$ 46.09	\$ 43.68 \$	41.20 \$	39.02 \$	36.96 \$	35.00 \$	33.15 \$	30.30 \$	29.74 \$	28.06

Average \$/kW-yr

36.32

Average \$/kw-hr all hours

0.004

Average \$/kw-hr on-pk hours

0.009

1 of 1 5. Schedule G

Minnesota Public Utilities Commission

DOCKET NO. E999/PR-24-09

Cogeneration and Small Power Production Tariff

Reporting Year: 2024

Utility: Moorhead Public Service

Minn. Rules 7835.1100 Schedule H: Wholesale Power Rates

Special Rule for Non-Generating Utilities: Schedule H must list the rates at which a non-generating utility purchases energy and capacity. If the non-generating utility has more than one wholesale supplier, schedule H must list the rates of that supplier from which purchases may first be avoided. If the non-generating utility with more than one wholesale supplier also chooses to file schedules A and B, the data on schedules A and B must be obtained from that supplier from which purchases may first be avoided. Please use the space below to include these rates.

The MRES Board of Directors establishes its avoided cost rate annually. For Qualifying Facilities of 100 kW or less, the PURPA Standard Rate is 3.06 cents per kWh for 2024. The rates for Qualifying Facilities greater than 100 kW are negotiated and will take into consideration factors enumerated in Section 292.304 of the regulations of the Federal Energy Regulatory Commission.

1 of 1 6. Schedule H