



*Minnesota Municipal Power Agency's 5 kW Hometown  
Solar  
Olivia, MN*

# INTERCONNECTION PROCESS

*System Impact Study  
Agreement*

## ABSTRACT

Agreement outlining the scope, timeline and responsibility of cost for a proposed DER's system impact to the distribution system



## System Impact Study Agreement

THIS AGREEMENT is made and entered into this \_\_\_\_ day of \_\_\_\_\_ 20\_\_ by and between \_\_\_\_\_, (“Interconnection Customer”), and \_\_\_\_\_, a municipal utility existing under the laws of the State of Minnesota, (“Area EPS Operator”). Interconnection Customer and Area EPS Operator each may be referred to as a “Party,” or collectively as the “Parties.”

### RECITALS

**WHEREAS**, the Interconnection Customer is proposing to develop a Distributed Energy Resource (DER) or generating capacity addition to an existing DER consistent with the Interconnection Application completed by the Interconnection Customer on \_\_\_\_\_ (date); and

**WHEREAS**, the Interconnection Customer desires to interconnect the DER with the Area EPS Operator’s Electric System; S

**WHEREAS**, the Interconnection Customer has requested the Area EPS Operator to perform a System Impact Study to assess the impact of interconnecting the DER with the Area EPS Operator’s Electric System, and potential Affected System(s);

**NOW, THEREFORE**, in consideration of, and subject to, the mutual covenants contained herein the Parties agreed as follows:

1. When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated, or the meanings specified, in the Municipal Minnesota Distributed Energy Resources Interconnection Process (M-MIP).
2. The Interconnection Customer elects and the Area EPS Operator shall cause to be performed a System Impact Study consistent with the M-MIP. The scope of a System

Impact Study shall be subject to the assumptions set forth in this Agreement; including Attachment A.

3. A System Impact Study will be based upon the technical information provided by Interconnection Customer in the Interconnection Application. The Area EPS Operator reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the System Impact Study.
4. A System Impact Study may, as necessary, consist of a short circuit analysis, a stability analysis, a power flow analysis, voltage drop and flicker studies, protection and set point coordination studies, and grounding reviews. A System Impact Study shall state the assumptions upon which it is based, state the results of the analyses, and provide the requirement or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. A System Impact Study shall provide a list of facilities that are required as a result of the Interconnection Application and non-binding good faith estimates of cost responsibility and time to construct. A Facilities Study may be required to identify all possibilities of facility upgrades, cost estimates and estimate of construction time.
5. A distribution System Impact Study shall incorporate a distribution load flow study, an analysis of equipment interrupting ratings, protection coordination study, voltage drop and flicker studies, protection and set point coordination studies, grounding reviews, and the impact on electric system operation, as necessary.
6. If the System Impact Study determines Affected Systems may be affected, a separate Transmission System Impact Study may be required. All Affected Systems shall be

afforded an opportunity to review and comment upon a System Impact Study that indicates potential adverse system impacts on their electric systems.

7. If the Area EPS Operator uses a queuing procedure for sorting or prioritizing projects and their associated cost responsibilities for any required Network Upgrades, the System Impact Study shall consider all Distributed Energy Resources (and with respect to Section 7.3 below, any identified Upgrades associated with such higher queued interconnection) that, on the date the System Impact Study is commenced.
  - 7.1. Are directly interconnected with the Area EPS Operator's Electric System; or
  - 7.2. Are interconnected with Affected Systems and may have an impact on the proposed interconnection; and
  - 7.3. Have a pending higher queued Interconnection Application to interconnect with the Area EPS Operator's Electric System.
8. A deposit of the equivalent of the good faith estimated cost of a System Impact Study shall be required from the Interconnection Customer when the signed Agreement is provided to the Area EPS Operator.
9. Any study fees shall be based on the Area EPS Operator's actual costs and include a summary of professional time. An invoice shall be sent to the Interconnection Customer within twenty (20) Business Days after the study is completed and delivered.
10. The Interconnection Customer must pay any study costs that exceed the deposit without interest, within twenty (20) Business Days, on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, the Area EPS

Operator shall refund such excess within twenty (20) Business Days of the invoice without interest.

11. Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions, shall be governed by the laws of the State of Minnesota. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

12. Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties.

13. No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

14. Waiver

14.1. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement, will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

14.2. Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by the

Interconnection Customer, shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Area EPS Operator. Any waiver of this Agreement shall, if requested, be provided in writing.

15. Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

16. No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties, or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

17. Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore, insofar as practicable, the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

18. Subcontractors

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

providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

18.2. The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires, as if no subcontract had been made; provided, however, that in no event shall the Area EPS Operator be liable for the actions or inactions of the Interconnection Customer or thier 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.

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

19. Inclusion of Area EPS Operator Tariffs and Rules

The interconnection services provided under this Agreement, shall at all times, be subject to the terms and conditions set forth in the tariff schedules and rules applicable to the electric service provided by the Area EPS Operator, which tariff schedules and rules are hereby incorporated into this Agreement by this reference. Notwithstanding any other provisions of this Agreement, the Area EPS Operator shall have the right to unilaterally change rates, charges, classification, service, tariff, or rule or any agreement relating thereto. The Interconnection Customer shall have the right to protest any such change through the Area EPS Operator's dispute resolution process, pursuant to the Area EPS Operator's rules and regulations.



**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.

Name of Area EPS Operator

Name of Interconnection Customer

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Title)

# Attachment A

## Assumptions Used in Conducting the System Impact Study

The System Impact Study shall be based upon the following assumptions:

- 1) Designation of Point of Common Coupling and configuration to be studied.
- 2) Designation of alternative Points of DER Interconnection and configuration.

1) and 2) are to be completed by the Interconnection Customer. Other assumptions (attached to this Agreement) are to be provided by the Interconnection Customer and the Area EPS Operator. The Area EPS Operator shall use the Reference Point for Applicability which is either the Point of Common Coupling or the Point(s) of DER Interconnection as described in IEEE 1547.

## Additional DER Technical Data Required for System Impact Study

If applicable, the Area EPS Operator shall provide a list of any additional technical data that is required to adequately perform the System Impact Study. This list of required technical data shall be attached to this Agreement. As indicated in Section 4 of the Study Process document of the M-MIP, this information is to be returned with the signed System Impact Study Agreement and deposit.

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### Data to Be Provided by the Area EPS Operator with the System Impact Study Agreement

Estimate Cost of System Impact Study	\$
Time duration to complete System Impact Study	Business Days