

## **MISO AFFECTED SYSTEM IMPACT STUDY AGREEMENT**

**Between**

**Northern States Power Company, a Minnesota corporation**

**Northern States Power Company, a Wisconsin corporation**

**And**

**Midcontinent Independent System Operator, Inc.**

This MISO Affected System Impact Study Agreement (“Agreement”) dated as of December 3, 2021, between Northern States Power Company, a Minnesota corporation (“NSPM”), and Northern States Power Company, a Wisconsin corporation (“NSPW” and either singularly or collectively with NSPM, the “NSP Companies” or “Transmission Owner”) and the Midcontinent Independent System Operator, Inc., a non-profit, non-stock corporation organized and existing under the laws of the State of Delaware (“MISO”, “Transmission Provider” or “Affected System Operator”). The NSP Companies and MISO each may be referred to individually as a “Party” or collectively as the “Parties.”

### **RECITALS**

**WHEREAS**, NSP Companies are utility operating companies providing electric service in the state(s) of Minnesota, North Dakota, South Dakota, Michigan and Wisconsin; and

**WHEREAS**, NSP Companies have or will have customer(s) (“Interconnection Customers”) proposing to interconnect certain Distributed Energy Resource (“DER”) project(s) to the NSP Companies distribution system, and

**WHEREAS**, NSP Companies, in the process of studying the interconnection of certain DER project(s) to the NSP Companies distribution system, has determined there may be an impact of such interconnections to the transmission system operated by MISO, and

**WHEREAS**, the electric transmission system operated by MISO may be affected (the “Affected System”) by the proposed DER interconnection(s) to the NSP Companies distribution system; and

**WHEREAS**, NSP Companies has determined that it is necessary and desirable for MISO to 1.) study the impact to the Affected System and 2.) determine, if necessary, any mitigations to such impacts, and

**WHEREAS**, NSP Companies contemplate a need to have master terms and conditions in place to govern coordination of the interconnection studies with MISO under which MISO will

determine if the proposed Interconnection Customer DER project would cause any adverse impacts to the transmission system (“MISO Affected System Impact Study” or “Study”), and the Parties desire to use this Agreement as the master terms applicable to the Study; and

**WHEREAS**, this Agreement governs the NSP Companies operations in five states, further the rules, regulations and procedures governing DER interconnections may vary by state, however, that the parties agree that MISO as a Transmission Provider is not governed by state DER rules, regulations or procedures; and

**WHEREAS**, under applicable state rules, regulations or procedures the Interconnection Customer is responsible for the costs of DER interconnection, and this includes the costs for upgrades and for MISO to perform the Study.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained in this Agreement, it is agreed:

## **ARTICLE I RIGHTS, OBLIGATIONS, and UNDERSTANDING**

**1.1 Agreement.** Except as otherwise set forth in this Agreement, MISO hereby agrees to perform any Study initiated under this Agreement according to the applicable terms set forth in this Agreement. Notwithstanding the applicability of these terms, the Parties may mutually agree that for a specific DER project they will use provisions or process other than those set forth in this Agreement and such provisions and processes may be documented in a manner different than that described herein. Those capitalized terms used in this Agreement that are not otherwise defined in this Agreement shall have the meaning set forth in the MISO Tariff.

**1.2 Agreement is Public.** The Parties acknowledge that this Agreement shall be made public and may be shared with any person or entity not related to the Study. However, the Exhibits to this Agreement, once they incorporate information that is specific to any DER project, shall not be public unless the persons or entities whose information is in these Exhibits provide consent for the information to be made public, or such information can be made public if required by law.

**1.3 Scope.** The scope of the Study will be agreed upon in writing by the relevant NSP Company(ies) and MISO prior to MISO conducting the Study.

**1.4 Confidentiality of Information.** MISO acknowledges and agrees that, in performing its obligations under this Agreement it will have access to and receive information of a confidential nature from the NSP Companies, the Interconnection Customer, and third-party confidential information which is information confidential to customers of the NSP Companies, and MISO agrees to use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. NSP Companies acknowledges and agrees that the Study(ies) that MISO

provides may contain information of a confidential nature regarding the MISO Transmission System, including information that is classified as Critical Energy Infrastructure Information (“CEII”) or confidential under the MISO Tariff. NSP Companies agree to use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination, NSP Companies may disclose Confidential Information and CEII to Interconnection Customers whose facilities are subject to the Study(ies) subject to the same requirements and limitations applicable to that NSP Companies’ own Interconnection Customers provided that NSP Companies have first caused such Interconnection Customers to execute (a) non-disclosure agreement(s) consistent with those that NSP Companies requires when sharing its own data.

**1.5 Conflicts.** In the event of a conflict between the body of this Agreement and any attachment or exhibit hereto, the terms and provisions of this Agreement shall prevail and be deemed to be the final intent of the Parties.

**1.6 Ownership of Studies.** MISO shall own all right, title, and interest in all Studies performed by MISO in connection with this Agreement. MISO grants to NSP Companies royalty-free, paid-up, irrevocable, worldwide, perpetual license, subject to Section 1.4, to use, disclose, copy, reformat, and distribute the Studies, and grants NSP Companies the right to prepare derivative works of any pre-existing materials that may be incorporated into a Study. The NSP Companies reserves the right to provide a redacted version of the Study or communications related to the Study, consistent with their business practices or state requirements to protect privacy expectations of its customers or to protect information that must be treated as confidential under applicable law.

**1.7 Third-Party Beneficiary.** This Agreement is not intended to and does not create rights, remedies, or benefits of any character 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.

**1.8 Previously Interconnected DER.** Any DER either previously studied by the NSP Companies or previously interconnected by the NSP Companies prior to the Effective Date of this Agreement are out of scope for the purposes of this Agreement, unless the previously studied DER’s design changes and the revised design has a potential impact to the MISO Transmission System due to the change. Existing DER will be included only for purposes of accurately modeling and studying the system as-is.

**1.9 Attributed Costs.** Any incremental additional DER project that is interconnected, depending on the facts and circumstances of such project, may trigger a MISO System Upgrade. In this situation, the incremental additional DER project shall be attributed as the basis for the related MISO System Upgrades costs. A “MISO System Upgrade” shall mean any necessary Network Upgrade on the MISO Transmission System, or an upgrade to an Interconnection Facility, a System Protection Facility, or an Affected System.

**1.10 Cooperation.** The NSP Companies, the Affected System Operator, and MISO shall cooperate with each other in all matters related to the conduct of Study(ies) and the determination of modifications to Affected Systems.

## **ARTICLE II SCOPE OF AUTHORIZATION**

**2.1 Scope of Authorization.** MISO is an independent consultant and is the entity responsible for performance of the Study, pursuant to this Agreement.

### **2.2 Process for Study:**

**2.2.1** When in the course of the NSP Companies performing a System Impact Study (or correspondingly similar study) for a DER interconnection application (Proposed DER Project) that cause the NSP Companies to believe that if a Proposed DER Project is interconnected it may either: 1.) result in new or additional backflow onto the transmission system during peak load conditions at a particular substation; 2.) require a new feeder to allow for interconnection; or 3.) require a MISO System Upgrade to allow for interconnection, then the NSP Companies will identify for MISO each such Proposed DER Project and request MISO to review these under the process in this Agreement. MISO will, on an agreed upon basis, study on an aggregate level by substation all of the identified Proposed DER Projects. As a courtesy, the NSP Companies may also identify for MISO if based on current conditions a Proposed DER Project if interconnected might result in new or additional backflow onto the transmission system during daytime minimum load conditions at a particular substation, and if so, MISO will let the NSP Companies know within twenty (20) business days if MISO will study this Proposed DER Project under this Agreement. If MISO does not provide this notification to the NSP Companies within twenty (20) business days, then the NSP Companies may proceed with its applicable DER interconnection process for the study and interconnection of this Proposed DER Project.

**2.2.2** MISO shall, in accordance with applicable procedures, guidelines, criteria and standards make the final determination of whether the MISO Transmission System is impacted by the substation aggregate of the identified Proposed DER Projects and identify the MISO System Upgrades necessary to mitigate such impacts. NSP Companies will be responsible for communicating the results of MISO's study and analysis to each of the identified Interconnection Customers.

**2.2.3** MISO will perform studies to determine the impacts of the identified Proposed DER Projects on the transmission system as follows: 1.) MISO will determine what specific studies to include (e.g., power flow studies, stability studies, short circuit studies, etc.), 2.) unless otherwise agreed the study will comply with the applicable MISO Tariff and Business Practices Manual rules and criteria, and 3.) study models and other details will be determined during the study kickoff meeting among MISO, NSP Companies and other affected systems if applicable.

**2.2.4** During the course of its DER interconnection application process, NSP Companies will identify to MISO those Proposed DER Projects described above and will group those projects together by substation associated with the distribution feeders for the planned interconnections, and provide MISO the information as follows:

- 1.) no later than thirty (30) business days prior to the beginning of the upcoming periodic/quarterly study, NSP Companies will forward to MISO information pertaining to the Proposed DER Projects included in the next study group by substation, which shall include; i) the name of the substation, ii) the name of the Proposed DER Project(s) to be studied, iii) any models or data that NSP Companies intends for MISO to utilize in the Study, iv) other information requested in Exhibit 1 (Form of Proposal for MISO Affected System Impact Study) that is reasonably available, and iv) such other information that NSP Companies or MISO deems advisable to include that is reasonably available;
- 2.) no later than ten (10) business days after receiving information from NSP Companies MISO shall provide NSP Companies an invoice in the amount of \$60,000 (“Standard Deposit”) for each such study group by substation;
- 3.) no later than thirty (30) business days after receiving MISO’s Standard Deposit invoice, NSP Companies will provide MISO with payment, and
- 4.) upon receipt of NSP Companies’ payment MISO will schedule a study kickoff meeting by substation among MISO, NSP Companies and other affected system parties if applicable.

**2.2.5** NSP Companies shall email to MISO a completed and signed Statement of Work, in the form of Exhibit 2 attached hereto, accepting those terms and authorizing and directing MISO to commence performance of each Study by substation under this Agreement. The NSP Companies must also send to MISO a deposit in an amount equal to the estimated total cost of each Study by substation as quoted by MISO (“Deposit”), and this amount must be received by MISO in order for the request to be deemed “received”. MISO will confirm receipt of the Deposit and acceptance of the request with an email to NSP Companies. If the Deposit is not made within thirty (30) business days of MISO providing the estimated total cost for the Study, then at MISO’s discretion it may reject the request to perform the Study for the group of identified Proposed DER Projects as well as any payments thereafter. MISO’s receipt of timely payment and MISO’s emailed acceptance of the completed Statement of Work shall create a binding agreement between MISO and the NSP Companies for the Study.

**2.3 Authorized Representatives:** MISO and the NSP Companies designate the following individual(s) to act as their Authorized Representatives, to issue and/or accept terms, quotes, and authorizations regarding this Agreement or any Study under this Agreement:

**A. For MISO**

**PRIMARY**

MISO  
Attention: Jesse Phillips  
ADDRESS 2985 Ames Crossing Road  
CITY Eagan, MN 55121  
Email: [jphillips@misoenergy.org](mailto:jphillips@misoenergy.org)  
Phone: 612-749-3811

**BACKUP**

MISO  
Attention: Andrew Witmeier  
ADDRESS 720 City Center Drive  
CITY Carmel, IN 46032  
Email: [awitmeier@misoenergy.org](mailto:awitmeier@misoenergy.org)  
Phone: 317-448-7552

**B. For NSP Companies**

**Primary**

Northern States Power Company  
Attention: Greg Gorski  
Transmission Account Rep  
ADDRESS 414 Nicollet Mall, 414-6  
CITY Minneapolis, MN 55401  
Email: [gregory.e.gorski@xcelenergy.com](mailto:gregory.e.gorski@xcelenergy.com)  
Phone: 612-330-7516

**With a courtesy copy to:**

Northern States Power Company  
  
Attention: DER Integration Team  
ADDRESS 414 Nicollet Mall  
CITY Minneapolis, MN 55401  
Emails: [SRCMN@xcelenergy.com](mailto:SRCMN@xcelenergy.com) ;  
[SolarProgram@xcelenergy.com](mailto:SolarProgram@xcelenergy.com) ; and  
[MNDER@xcelenergy.com](mailto:MNDER@xcelenergy.com)  
(use all three email addresses)

Either Party may change their Authorized Representative or update information by sending a written notice to the other party stating the change and providing updated contact information email being sufficient form of communication for such administrative notices provided that the email comes from an existing Authorized Representative or a Director level employee with an email address matching the domain of the Party. Such changes shall not be deemed amendments to this Agreement and shall be effective ten (10) business days after mailing or at such earlier time as the receiving party acknowledges receipt of the written notice.

**2.4 Schedule.** MISO will use reasonable efforts to complete the Study for each applicable substation by the time listed in the Statement of Works. The inability of MISO to complete the Study by said date due to events or conditions beyond MISO's reasonable control, shall operate to extend the Study due date by the amount of time needed to correct or remedy such extenuating circumstances. MISO shall notify NSP Companies as soon as possible of expected or realized delays from the agreed upon completion date for the applicable Study, whether excused or not. If MISO claims the existence of events or conditions beyond its control prevent its completion of a Study by the required date, then MISO will include in its notification to NSP Companies 1.) an explanation of such events or conditions and 2.) the commercially reasonable efforts that MISO commits to take to promptly overcome such circumstances. In the event of a material change in

scope or in the event MISO does not receive all required information to perform the applicable Study from NSP Companies, the Parties shall agree upon an extension of the deadline for delivering the applicable Study. The content of the Study may also include additional provisions as MISO determines to be appropriate, such as stating other procedural requirements that need to be followed so as to have MISO appropriate consider the project that was the subject of the Study or other items referenced in Section 2.6 below.

**2.5 Facilities Study for Upgrades.** When the Study shows that MISO System Upgrades are needed in order to properly interconnect the Interconnection Customer(s) Proposed DER Project(s) to the NSP Company(ies) distribution system, then the Parties and Interconnection Customer(s) would need to determine next steps, which likely would include development of a Facilities Study performed by the affected Transmission Owner(s), that would examine the project parameters, costs of any necessary MISO System Upgrades, and timeline for the proposed DER project(s) to proceed. A corresponding Facilities Study Agreement shall be subsequently executed by the affected Transmission Owner and MISO as to allow the affected Transmission Owner to perform said Facilities Study. However, the Parties agree that nothing would prohibit MISO and the affected Transmission Owner(s), from providing a high level, non-binding estimate of the cost and timeline to complete the upgrades identified in the Study.

**2.5.1** The Parties acknowledge that Interconnection Customers will be responsible to fund the upgrade cost prior to commencement of the work, and the interconnection is contingent upon the completion of the Network Upgrade.

**2.5.2** In furtherance of the obligations under this Section 2.5, NSPM and NSPW may enter into any necessary related agreements as may be required under applicable state laws.

### **ARTICLE III ADDITIONAL TERMS**

The Parties agree to the following additional terms:

**3.1 Effective Date and Term.** This agreement shall become effective on the date first written above, subject to any required acceptance or approval by FERC where applicable, and shall remain in effect: (1) unless terminated by either Party by the giving of one (1) year written notice to the other Party; or (2) until either Party provide notice of immediate termination where that Party believes that any provision in this Agreement is not consistent with applicable law or regulation.

**3.2 Force Majeure.** Neither Party is liable for non-performance under this Agreement to the extent the non-performance is caused by events or conditions beyond that Party's reasonable control, and the Party makes all commercially reasonable efforts to perform, and any applicable deadlines for performance shall be extended for a number of days equal to the duration of such events or conditions. A Party claiming such an event or occurrence shall notify the other Party immediately in writing and not later than two (2) business days after the discovery of the event

or occurrence. The following shall not constitute or cause a force majeure event or condition: a negligent act or omission, intentional wrongdoing, or lack of credit or economic hardship by the Party claiming Force Majeure.

**3.3 Invoicing and Payment.** MISO shall invoice NSP Companies for the actual costs incurred by MISO in performing the Study pursuant to this Agreement on a time and material/expense basis with no markups for profit, for which MISO shall maintain records available to the NSP Companies, twenty (20) business days after the Study is completed and delivered to the NSP Companies or within twenty (20) business days after notification of withdrawal of the project. The invoice shall provide a credit equivalent to the Deposit paid to MISO. In the event of an amount due to MISO, the NSP Companies shall remit the balance due to MISO within twenty (20) business days of issuance of the invoice. In the event that the Deposit exceeds the MISO actual costs for the Study as shown in the invoice, then MISO shall refund the difference to the NSP Companies within twenty (20) business days of issuance of the invoice. NSP Companies will in turn invoice the Interconnection Customer(s) for MISO's costs.

**3.4 Independent Contractor.** MISO acknowledges and agrees that, in performing its obligations under this Agreement, it is an independent contractor and not an employee of NSP Companies for any purpose; nor does MISO have authority, express or implied, to act as an agent for NSP Companies; nor, by entering into this Agreement, do NSP Companies and MISO intend to become partners or to enter into a joint venture.

**3.5 Standard of Performance.** In performing its obligations under this Agreement, MISO shall act at all times in a competent and diligent manner, shall comply with the terms of this Agreement, shall comply with all applicable terms of the MISO Tariff, shall follow Good Utility Practice (as that term is defined in the Tariff) and shall comply with all applicable laws, rules, and regulations. For the Study, MISO shall complete the Study in accordance with the schedule established in this Agreement and any attachment or exhibit hereto and shall provide NSP Companies with a final report. MISO shall complete the Study and deliver the final report for that Study by the date specified in the Statement of Work. NSP Companies and MISO may mutually agree upon a revised schedule or date for a specific Study due to changed circumstances or the availability of updated or revised data.

**3.6 Warranty.** In preparing the Study, MISO shall have to rely on information provided by the Interconnection Customer and NSP Companies, and each Party acknowledges that it may not have control over the accuracy of such information. Accordingly, beyond the commitment to use reasonable efforts in preparing the Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Study), as applicable, no Party nor any subcontractor or consultant employed by such Party makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Study, the content of the Study, or the conclusions of the Study.



**3.7 Indemnification and Limits of Liability.** The Parties shall at all times indemnify, defend, and save each other harmless from, any and all damages, losses, claims, including claims and actions related to injury to or death of any person or damage to property, demands, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the performance of any obligations under this Agreement. With the exception of cases of gross negligence or intentional wrongdoing by the Party seeking indemnification, a Party shall not be liable under this Agreement, whether for breach of contract or otherwise, for any special, consequential, or indirect damages of any kind, including but not limited to, any loss of revenue or loss of profits, and/or monetary sanctions and costs associated with compliance of non-monetary sanctions imposed by FERC, NERC, Regional Entity or their successors or assigns.

**3.8 Dispute Resolution.** Any dispute, or assertion of a claim, arising out of or in connection with this Agreement, shall be resolved in accordance with Attachment HH of Transmission Provider's Tariff. The Parties agree that use of dispute resolution procedures under the Tariff is chosen as a matter of convenience and does not constitute a waiver by NSP Companies or Interconnection Customer of any rights pursuant to any other agreement, nor constitute a concession by NSP Companies that it is provided Transmission Service by MISO pursuant to the Tariff.

**3.9 Choice of Law.** This Agreement (including signed Exhibits) shall be interpreted, construed, and governed by the laws of the State of Minnesota, without regard to conflicts of laws principles. The obligations set forth in this Section shall survive termination of this Agreement.

**3.10 General.** This Agreement, including its exhibits, represents the entire understanding of the Parties and supersedes all prior conversations, representations, agreements, and other communications. Except as provided in Statement of Work in Exhibit 2, this Agreement may be amended only by written instrument signed by authorized representatives of both Parties. In the event that any provision of this Agreement is determined to be invalid or unenforceable, then to the extent that such provision is invalid or unenforceable, it shall not affect the validity or enforceability of any other provision of this Agreement. Neither termination nor expiration of this Agreement for any reason shall release either Party from liabilities or obligations set forth in this Agreement which (i) the Parties have expressly agreed will survive such termination or expiration, or (ii) by their nature would be intended to be applicable following any such termination or expiration. The headings of the sections in this Agreement are for the purposes of convenient reference only and are not intended to be part of this Agreement, or to limit or affect the meaning or interpretation of any of the terms hereof. This Agreement may be executed in two or more counterparts, each of which will be deemed an original and all of which together will constitute one and the same document.

SIGNATURE PAGE FOLLOWS

IN WITNESS WHEREOF, the Parties have executed this Agreement by their duly authorized officers or agents on the respective date(s) written below.

**MISO:**

Midcontinent Independent System Operator, Inc.



By: \_\_\_\_\_

Signature

Jesse Phillips

Printed Name

Manager Resource Utilization

Title

12/3/2021

Date

**NSP Companies:**

Northern States Power Company,  
a Minnesota corporation,  
doing business as Xcel Energy.

By: Ian Benson Digitally signed by Ian Benson  
Date: 2021.12.02 13:09:53 -06'00'

Signature

Ian R. Benson

Printed Name

Area Vice President - Trans Strategy & Planning

Title

\_\_\_\_\_  
Date

**NSP Companies:**

Northern States Power Company,  
a Wisconsin corporation,  
doing business as Xcel Energy.

By: Ian Benson Digitally signed by Ian Benson  
Date: 2021.12.02 14:44:07 -06'00'

Signature

Ian R. Benson

Printed Name

Area Vice President - Trans Strategy & Planning

Title

\_\_\_\_\_  
Date

## **Exhibit 1**

**Form of Proposal for Affected System Impact Study:  
[Name of Study]**

## **Exhibit 2**

### **Form of Statement of Work for MISO System Impact Study: [Name of Project/Study]**

This Statement of Work (“SOW”) is made by Northern States Power Company, a Minnesota corporation and Northern States Power Company, a Wisconsin corporation (“NSP Companies”) and the Midcontinent Independent System Operator, Inc. (“MISO”) pursuant to that [DATE] MISO Affected System Impact Study Agreement (“Agreement”). Through this SOW, NSP Companies direct MISO to commence performance of a MISO Affected System Impact Study. NSP Companies, MISO agrees that the MISO Affected System Impact Study shall be conducted and compensated according to the following terms:

1. All terms and conditions of the [DATE] MISO Affected System Impact Study Agreement apply.

2. Applicable Substation: \_\_\_\_\_ 3. Type of Study: \_\_\_\_\_

4. Project No & Group No. \_\_\_\_\_ 5. Study Commencement Date: [DATE]

6. Study Target Completion Deadline: [DATE]

7. Deposit amount owed to MISO for Study \$\_\_\_\_\_. Consistent with Section 2.2 of the Agreement, this amount must be paid by the NSP Companies to MISO before this request is considered to have been received by MISO and is therefore eligible for acceptance under the terms of the Agreement Section 2.2.

8. Additional Information, Terms and Requirements (use additional pages if appropriate)

9. Conflicts, Scope & Incorporation of Terms: The terms of the Agreement shall be applicable to this SOW. Terms contained in correspondence between the Parties that are not incorporated into this SOW shall not be deemed binding or of any effect. The terms of this SOW shall govern only the Study identified herein.

<b>NSP Companies:</b> Northern States Power Company, a _____ corporation, doing business as Xcel Energy
<b>By (Printed Name and Title):</b>
<b>Signature:</b>
<b>Date:</b>

**MISO's Acknowledgment.**

MISO hereby agrees to the terms of this SOW

<b>By (Printed Name and Title):</b>
<b>Signature:</b>
<b>Date:</b>