

January 3, 2019

Daniel P. Wolf, Executive Secretary Minnesota Public Utilities Commission 121 7<sup>th</sup> Place East, Suite 350 St. Paul, MN 55101-2147

Subject: Dakota Electric Association® Updated Compliance to

Order Establishing Updated Interconnection Process and Standard Interconnection Agreement in E-999/CI-01-1023 and E-999/CI-16-521

Docket No. E-111/M-18-711

Dear Mr. Wolf:

On August 13, 2018, the Minnesota Public Utilities Commission (Commission or MPUC) issued an *Order Establishing Updated Interconnection Process and Standard Interconnection Agreement* (Order) in docket numbers E-999/CI-01-1023 and E-999/CI-16-521. The August 13 Order (at Page 23) indicates that "The Commission adopts the *Distributed Energy Resources Interconnection Process* (MN DIP) and Distributed *Energy Resource Interconnection Agreement* (MN DIA) in the form attached, which includes the revisions described below and edits to ensure consistency between the documents' glossaries of terms." The Order requires (at Page 31) that "Within 90 days, all rate-regulated utilities except Xcel shall file updated tariffs for Commission review and approval under Minn. Stat. § 216B.1611, subd. 3."

On November 9, 2018, Dakota Electric filed documents in support of its updated distributed generation interconnection tariffs for Commission review and approval as required by the August 13 Order. (This compliance filing was assigned Docket No. E-111/M-18-711.) The documents included a Distributed Energy Resource Interconnection Process (MN DIP) and a Distributed Energy Resource Interconnection Agreement (MN DIA). The base documents used for the November 9 filing (MN DIP and MN DIA) were

created by the Distributed Generation Working Group (DGWG). Dakota Electric based the filed documents upon the latest available versions of these documents.

Since Dakota Electric's November 9 filing, updated versions of both the MN DIP and MN DIA have been produced by the Distributed Generation Work Group and made available on November 27, 2018. This filing provides updated Dakota Electric documents, based upon the November 27 versions of the DGWG's MN DIP and MN DIA documents. Dakota Electric is calling its updated documents MN DIP-DEA and MN DIA-DEA to clearly identify which document is being referenced. With this updated compliance filing, Dakota Electric is submitting updated documents as replacements for the procedure (MN DIP) and interconnection agreement (MN DIA) documents submitted on November 9.

# **Dakota Electric's Updated Compliance**

Dakota Electric appreciates the significant effort which all the members of the DGWG have expended on this topic. We hope that this updated process will provide our members with more options and help expediate the integration of renewables to the Dakota Electric distribution system.

Just as was done within the November 9 filing, Dakota Electric has taken the latest version of the MN DIP and MN DIA documents and modified them to support their use with the interconnection of distributed generation to the Dakota Electric system. The documents attached to this filing are direct replacements of the documents provided with the November 9 filing. Most of the same changes which were included and documented in the November 9 filing have been made to these documents. Not all of the same changes were necessary, as a few of the changes made to the documents in the November 9 filing have since been incorporated within the working group updated versions of the MN DIP and MN DIA. Dakota Electric appreciates the effort to create and update the MN DIP and MN DIA documents. The November updates to the documents resolved several of the concerns which Dakota Electric identified within its November 9 filing. The November set of documents have also added several new forms and made some modifications to portions of the document. The set of documents included with this supplemental filing are based upon the updated November set of MN DIP and MN DIA.

In addition to providing comments to the portions of the documents which were added since November 9, Dakota Electric has had time to allow additional staff at the Cooperative to review the documents. During November and December Dakota Electric has started looking at how to implement the new processes. This time has allowed us to identify additional areas where changes to the documents could help improve the information provided to our Members or the overall process. Some of the changes proposed to the documents are due to Dakota Electric's unique nature of not being a vertically integrated utility and not owning or operating transmission systems. In a few places within the documents the language is requiring Dakota Electric to perform Transmission Owner duties for the interconnection or is not clear to the reader what responsibility Dakota Electric has with providing transmission studies and making transmission interconnection modifications. Dakota Electric has made some changes to the words and provided alternative language for those sections which involve Transmission Owner responsibilities to clarify Dakota Electric's responsibilities for the reader.

The documents included with this filing have the applicable changes documented with Dakota Electric's November 9 filing and additional proposed changes have been made to these documents. The additional changes and the reasons why Dakota Electric made those changes are described below. The following documents are included with this filing. Both a clean and red-lined version of each of the documents are included.

- A) Dakota Electric's Distributed Energy Resource Interconnection Process (MN DIP-DEA).
- B) Dakota Electric's Distributed Energy Resource Interconnection Agreement (MN DIA-DEA).

Following is a discussion of the <u>additional</u> changes which Dakota Electric has been made to the process and interconnection agreement documents since the November 9 versions were provided. These changes were not included in the November 9 Dakota Electric filing. Please review the November 9 filing for Dakota Electric's comments about the prior proposed modifications in the attached MN DIP-DEA and MN DIA-DEA documents.

# <u>Distribution Interconnection Process (MN DIP-DEA)</u>

As reported in the November 9 Dakota Electric filing, the following have been modified within the MN DIP document;

- Changed Area EPS to Dakota Electric throughout the document
- In Section 1.1.5.1.2 increased the threshold from 20kW to 40kW where
  Dakota Electric will use the Uniform Statewide Contact for qualifying
  systems. Also underlined the word qualifying to highlight this distinction to
  the reader.
- Established the Application Fees. In Section 1.4.1 and 1.5.1 removed the "up to" wording before the fee amount, to clearly define the fee amount to be charged by Dakota Electric for the Pre-Application and Interconnection Application fees.

The following is a discussion of the additional changes which have been made to the latest version (version 2.3) of the MN DIP document. This revised version is referred to as MN DIP-DEA to clearly identify the version modified to support DER interconnection to the Dakota Electric system.

<u>Document Name</u> - The referenced name of the process document has been changed from "MN DIP" to "MN DIP-DEA" to clearly define which document is being referenced. Also, the references to the interconnection agreement, "MN DIA", have been changed to "MN DIA-DEA" to also clarify which document is being referenced.

This change also affected the definitions of MN DIP and MN DIA. So, these two definitions were updated to include reference to the "Dakota Electric Association version" of the documents and to reflect the change in the document names.

<u>Section 3.4.5.2</u> - In Section 3.4.5.2 Dakota Electric has added the words "*Area EPS*" before facilities to more clearly define what facilities are being discussed. When

others at Dakota Electric read the section, as it was written, it was not clear which facilities this referred to, so Dakota Electric thought that adding clarifying words would be helpful.

Section 4.3 System Impact Study – In section 4.3.6, Dakota Electric has added proposed language to require Dakota Electric to provide information to the Interconnection Customer about potential Transmission System impacts, if known, before any System Impact Study is started. Dakota Electric believes it is important to inform the Interconnection Customer about any significant interconnection expenses as soon as reasonably possible. The Interconnection Customer may choose to not proceed and pay for any studies if transmission system impacts are expected.

Dakota Electric has also added a sentence to the end of this section to clarify that Dakota Electric will coordinate with the Transmission Owner to obtain a study agreement document for the Interconnection Customer.

Section 4.4 Facilities Study — Within the base MN DIP document, the second paragraph of Section 4.4.1 requires Dakota Electric to provide a facilities study for DER integration. As written this facilities study includes transmission system impact. Dakota Electric is unique for a Minnesota regulated electrical utility and does not own or operate transmission facilities. So, Dakota Electric is not able to provide transmission facility studies. In section 4.4.1 second paragraph, the word "distribution" has been added before facilities study to clearly describe what Dakota Electric can provide. Also, in section 4.4.1, words have been added to describe the process where "Dakota Electric will coordinate with the local transmission provider to provide a Transmission Facilities Study agreement to the Interconnection Customer."

It is important to note that the response times which are outlined in 4.4.1, through 4.4.11 are only applicable for Dakota Electric and the Interconnection Customer. Dakota Electric does not have authority or control over the response times for the transmission

providers. To help clarify this for the reader, the word "distribution" has been added before "facilities study" to sections 4.4.1, through, 4.4.11.

Section 5.1.3 – is a new section added to MN DIP-DEA document. As written the base MN DIP document only includes the Certification of Completion within the Simplified Process and it is not clear if the Certification of Completion is required for non-qualified and the other larger installations. Dakota Electric proposes that the Certification of Completion is required to be filed for all interconnections, prior to energization. This coordination and certification is especially important for larger systems. Larger systems will have a much greater chance of affecting the distribution system, including other Members supplied by the local distribution system during start up testing of the DER.

Within the attached Dakota Electric version of the MN DIP (MN DIP-DEA) Section 5.1.3 has been added in support of this proposal. The new Section 5.1.3 clearly states that the Certification of Completion is required for all DER interconnections. Section 5.1.3 is very similar to Section 2.3.2, which requires the Certification of Completion for qualified less than 20kW systems. The new 5.1.3 section provides a time frame exception for systems larger than 40kW, so they do not have a specific time frame defined for inspection and testing. While many systems can and will be inspected and tested within the 10-day window, some systems larger than 40kW require additional coordination time for testing and inspection due to their complexity. This is especially true for non-inverter based DER interconnections where there is protection and control functions which require significant testing. Also, since larger systems can be more complex, it will take longer to test the operation of the overall system.

While Dakota Electric works with the Member and the installer to complete the testing as soon as reasonably possible, Dakota Electric believes that not requiring a specific testing timeframe will also be a benefit to some of our Members. When testing many of our interconnected distributed generation systems, the testing of the DER system affects the Member's connected load. This is because, as part of the normal set of testing, an outage to the interconnected DER which includes the member's load is conducted.

So, the DER testing can affect the Member's normal business operations and needs to be done at a time which is less disruptive for the Member's business. Coordinating a time for this testing, which does not negatively affect their business is important for the Member. This coordination may cause the testing to be scheduled outside of normal business hours and beyond the expected 10-day window. It would not be in the best interests of our Members to require Dakota Electric and the Member to complete the inspection and testing within a 10-day window for all installations. Providing this flexibility for Dakota Electric and the Member will allow better coordination for the larger DER interconnections.

Section 5.6.1 – This section, as written in the base MN DIP document, requires Dakota Electric to provide cost estimates for Network Upgrades and to provide a detailed itemization of such costs. Network Upgrades is defined to be transmission system additions and modifications. Since Dakota Electric is not vertically integrated and does not own or operate transmission facilities, Dakota Electric is not able to provide costs for Network Upgrades (transmission modifications). So, "and Network Upgrades" has been removed from the last sentence in section 5.6.1 in the MN DIP-DEA document.

### Changes to the Definitions

MN DIP – To clarify which document is being referenced the name of the Dakota Electric version of the process document was changed from "MN DIP" to "MN DIP-DEA" The change to the name of the document also affected the definition of MN DIP. So, this definition was updated to include reference to the "Dakota Electric Association version" of the documents and to reflect the change in the document name.

MN DIA - To clarify which document is being referenced the name of the Dakota Electric version of the process document was changed from "MN DIA" to "MN DIA-DEA" The change to the name of the document also affected the definition of MN DIA. So, this definition was updated to include reference to the "Dakota Electric Association version" of the documents and to reflect the change in the document name.

Forms Attached to the Process Document - For the Dakota Electric November 9 filing, many of the attached forms were attached using PDF formatting, in this version of the DIP we have used Word formatted versions of the documents. As was discussed in the November 9 filing, Dakota Electric is working with Star Energy and many other Cooperatives to create and utilize an on-line application portal. As a requirement of the on-line application portal, ALL forms will automatically be created by the user interacting with the on-line portal. As the user answers questions the information required to complete each form will be gathered. The result of this process will be the creation of a form which is very similar to the forms attached to the MN DIP-DEA document. It is expected that formatting differences may occur due to the computer implementation process, but the information requested from the user will be the same as what has been attached to the MN DIP-DEA document.

Attachment 1, Pre-Application Report Request Form – A Pre-Application Report Request Form has been added as Attachment 1. The form has replaced the Pre-Application Report Request Form which was created by the DGWG and included in the updated MN DIP. The replacement form is designed to work with the new on-line portal and is asking for the same information from the user which the DGWG form required. Dakota Electric will be requiring that all Pre-Application Report Requests are submitted using the on-line portal. Dakota Electric will not accept emailed or mailed pre-application submittals. Dakota Electric believes that this will help maintain a consistent and easy method for our members to request this information and allow for tracking of the applications.

Attachment 2, Exhibit C – Certificate of Completion – A Certificate of Completion form has been inserted in place of the DGWG form. The main difference between the DGWG form and the form which is included in the Dakota Electric version of the document is the elimination of the Electrical Inspector signature requirement. To help reduce the installation requirements for the Member and installer, Dakota Electric

has modified the Certificate of Completion certification form to not require a signature from the Electrical Inspector on this document. As the form was originally configured, the electrician and/or installer would need to remember to printout this form and when meeting with the Electrical Inspector have this form signed or attach and supply another signed document. Dakota Electric believes that requiring the signature would result in additional work by the installer or the member to get this signature and that this additional effort is not necessary.

Dakota Electric routinely interconnects with new homes and businesses without obtaining the electrical inspector's signature, but instead obtains a copy of the electrical inspection permit as required by state statutes. State Statutes 326B.36 Subd. 5. Duty of electrical utility requires that "no electrical installation subject to inspection by the commissioner shall be newly connected or reconnected for use until there is filed with the electrical utility supplying power a certificate of the property owner or licensed electrician, directing the work that inspection has been requested and that the conditions of the installation are safe for energization...." Dakota Electric requires that the electrician provide a copy of the electrical inspection permit to Dakota Electric prior to energizing any new service. Dakota Electric crews also check the meter socket for the signed electrical inspector's sticker prior to energizing a new service.

During the process of creating the on-line application portal, Dakota Electric would like to allow the installer to enter the information for this Certificate of Completion, including details about the electrical inspection permit, within the portal system. The information on Attachment C would be requested from the portal user and entered into the portal database. The portal user would also be asked to attach a copy of the electrical inspection permit certificate when providing this information to the portal. Dakota Electric does not see any reason for us to obtain the signature of the local Electrical Inspector.

# System Impact Study and Facility Study discussion -

As written within the MN DIP document, there is a general assumption that the distribution utility and the transmission utility are closely tied. For all the other regulated

utilities in the State of Minnesota the relationship between the transmission and distribution is all within the same corporate structure. For Dakota Electric all of the transmission coordination is done by a completely separate organization Great River Energy. Dakota Electric is a member of Great River Energy and as such there is a close relationship between the two organizations, but they are legally separate organizations. So, the study agreements which are included with the MN DIP, do not clearly provide separation between the transmission company and the distribution company. The following proposed changes are intended to provide clarity for the Interconnection Customer but are not intended to require the Interconnection Customer to work with the transmission owner without help from Dakota Electric. These changes are intended to reflect the realities of Dakota Electric being a separate legal entity from the transmission provider.

# Attachment 6 - System Impact Study Agreement -

Section 2.0 – added "distribution" before system impact study to clearly define the scope of this agreement.

Section 4.0 - added words to clarify that only "known construction and modifications to the Dakota Electric system" will be provided with the system impact study results. Since the system impact study is not a complete facility study, it is possible that not all the required construction and modifications will be known upon completion of the system impact study. The facilities study is to "specify, and estimate the cost of, the equipment, engineering, procurement and construction work needed to implement the conclusions of the" system impact study. So, adding this modification to 4.0 clarifies to the interconnection customer what information will be provided upon the conclusion of the system impact study.

Section 8.0 - removed the requirement for Dakota Electric to take payment for transmission studies from the Interconnection Customer. Since Dakota Electric is not a vertically integrated utility and does not own or operate the local transmission system, Dakota Electric can't provide transmission impact studies and should not be taking payment for these studies. Dakota Electric will support the applicant with their communication with the local transmission owner, but if transmission studies are required

this will require a separate agreement with the transmission owner and payment to the transmission owner.

Signature Block – modified the signature block of the agreement to have each of the parties place a date of their signature below their signature block. Dakota Electric believes that this will help facilitate the inclusion of this document within the on-line application portal and better support electronic signatures.

Attachment 7.0 Facilities Study Agreement – As with the system impact study agreement, Dakota Electric is not able to perform transmission studies and thus can't provide information about Network (transmission) Upgrades. In the third Whereas clause, Dakota Electric has added the word "distribution" before "facilities study" to provide clarity for the reader as to what Dakota Electric is providing with this facilities study.

Section 2.0 – added "distribution" before the words facilities study.

Section 3.0 – added "distribution" before the words facilities study.

Dakota Electric has also added "Distribution" before the defined word "Upgrades" to clearly state that this agreement will only provide information about the Distribution Upgrades and does not include information about Transmission Upgrades. While Dakota Electric will assist and help coordinate the transmission studies with the transmission owner on behalf of the Interconnection Customer, it would not be accurate to have Dakota Electric sign an agreement stating that Dakota Electric will provide information which it does not have.

Section 5.0 added "distribution" before the words facilities study.

Signature Block - Dakota Electric modified the signature block of the agreement to have each of the parties place a date of their signature below their signature block.

Dakota Electric believes that this will help facilitate the inclusion of this document within the on-line application portal and support electronic signatures.

# Other Miscellaneous Changes to the MN DIP

Miscellaneous spacing and formatting – corrected spacing between paragraphs to be consistent and make paragraph formatting consistent.

<u>Page Numbering</u> – Started page number one, the page after the Table of Contents.

<u>Page Footers</u> – updated the page footers to have page numbers and words describing that section of the document.

Attachment 4 – In Attachment 4, changed February 2019 to Late 2019 for completion of the TIIR documents to match up with the statement in the definitions section.

## <u>Distribution Interconnection Process (MN DIA-DEA)</u>

As reported in the November 9 Dakota Electric filing, the following have been modified within the MN DIA document:

- Changed Area EPS to Dakota Electric throughout the document.
- Miscellaneous spacing and formatting changes.

The following are additional changes which have been made to the attached version of the MN DIA-DEA document:

<u>Document Name</u> - The referenced name of the interconnection agreement document has been changed from MN DIA to MN DIA-DEA to clearly define which document is being referenced. Also, the references to interconnection agreement, MN DIP, have been changed to MN DIP-DEA to also clarify which document is being referenced.

This change also affected the definitions of MN DIP and MN DIA. So, these two definitions were updated to include reference to the "Dakota Electric Association version" of the documents and to reflect the change in the document names.

<u>Signature Block</u> – The signature block has been reformatted and modified to include both a signature and a printed name. This was done for both signature blocks, for Dakota Electric and the Interconnection Customer.

Article 5. Cost Responsibility for Network Upgrades – The definition of Network Upgrades is such that it only includes transmission upgrades. The term Upgrades is defined to include both Transmission and Distribution Upgrades. It is important to understand the definitions of these terms when reading the documents.

Article 5 is talking about cost responsibility for Network (Transmission)

Upgrades. Since Dakota Electric does not own or operate Transmission facilities, Dakota Electric is not able to provide the information and services for Network Upgrades (Transmission) included within this Article 5, as written. Dakota Electric has rewritten the Article 5 to reflect what Dakota is able to provide for the Interconnection Customer and to provide clearer expectations for the Interconnection Customer. Dakota Electric thought about striking this entire article, but instead decided to make some small modifications to this section.

In section 5.2 Dakota Electric added the words "work with the Transmission Owner so they can" provide the information for the Interconnection Customer. Also added "Transmission Owner" in two places. Once to replace the area EPS Operator to make it clear this is not Dakota Electric and the other place added "or the Transmission Owner" to make it clear that either may elect to pay for the Network Upgrades.

In section 5.2.1 Dakota Electric removed "and Affected System operator" from the first sentence. As written this could require Dakota Electric to repay to the Interconnection Customer for payments which were made to third party "Affected System". This modification to section 5.2, makes it clear that we are talking about only payments made to Dakota Electric. These payments could be for transmission construction that Dakota Electric has paid to other Affected Systems. As revised it now clearly does not include payments which were not made to Dakota Electric.

In section 5.2.1.1. added "to Dakota Electric" to make it clear that only amounts advanced to Dakota Electric can be reimbursed by Dakota Electric.

<u>Article 13. Notice – This section was reformatted and the standard Dakota</u> Electric Association information was inserted.

<u>Article 14. Signatures</u> – The signature block has been reformatted and modified to include both a signature and a printed name. This was done for both signature blocks, for Dakota Electric and the Interconnection Customer.

### Changes to the Definitions

MN DIP – To clarify which document is being referenced the name of the Dakota Electric version of the process document was changed from "MN DIP" to "MN DIP-DEA". The change to the name of the document also affected the definition of MN DIP. So, this definition was updated to include reference to the "Dakota Electric Association version" of the documents and to reflect the change in the document name.

MN DIA - To clarify which document is being referenced the name of the Dakota Electric version of the process document was changed from "MN DIA" to "MN DIA-DEA". The change to the name of the document also affected the definition of MN DIA. So, this definition was updated to include reference to the "Dakota Electric Association version" of the documents and to reflect the change in the document name.

MN Technical Requirements – modified anticipated date to "anticipated in late 2019" to match up with the definition in MN DIP-DEA.

<u>Attachment 3: One-Line Diagram Attachment</u> – Dakota Electric has added some words to Attachment 3, to describe what, at a minimum, needs to be included in the one-line diagram. This is intended to help the reader of the base document understand what is

expected to be included with this attachment. This was the only attachment without a description explaining what the attachment should include.

### Electronic Submittal of DER Applications and changes to the Application Forms

As discussed in Dakota Electric's November 9 filing, since Dakota Electric has slightly more than 40 DER applications per year, Dakota Electric is required to provide an electronic application process.

Dakota Electric has reached out and is in discussions with Star Energy to use their on-line application system for the Dakota Electric members. Star Energy is working with several cooperatives to jointly create this on-line application portal. Dakota Electric is excited to have this option for accepting electronic application and to allow us to better respond to our members. With the plan to use the Star Energy on-line application portal, the application forms attached to the Dakota Electric version of the procedure document, MN DIP-DEA, are reflective of the application forms which Star Energy is planning on using within the on-line application system. The on-line application process is designed to request the same information from the user as is required by the forms within the MN DIP document and developed by the DGWG. The look and feel of the forms is different than the DGWG forms, but this allows Dakota Electric to easily utilize the Star Energy DER on-line application portal.

The forms which are attached to the MN DIP-DEA document are designed to work with the Star Energy on-line application process. It is expected that there will be slight differences, especially with the formatting of the final on-line portal generated documents. The on-line application portal is being designed to help reduce the complexity of the application process for the interconnection applicant. The applicant will be asked a series of questions and from the answers to those questions, the process applicable to that DER installation will be automatically identified. Thus, the applicant will not need to know if they should submit the simplified application or the normal interconnection application. The applicant will simply start entering in the information about the interconnection and the on-line portal will decide if additional information is

required to complete the correct application. Dakota Electric believes that this will greatly reduce confusion about the application process for the user.

After answering the application questions, the applicant will be shown the completed application. If the person entering the application information into the on-line portal is not the Member/Consumer, the on-line portal will support the electronic distribution of the completed application to the Member/Consumer for their signature. The on-line portal is expected to support electronic signatures of the application by the Member/Consumer. Payment of the application fees will also be directly supported by the on-line portal.

As the on-line application portal is utilized, additional features will be developed, and we are looking forward to interacting with installers and Members to learn where the on-line system may be enhanced.

One of the requirements in section 1.2.2.2 of the MN DIP is that Dakota Electric post on its website, all the application forms in a format which allows for electronic entry of data. Since the planned on-line application system will be able to automatically time stamp the on-line filed applications and thus supports an accurate queue, Dakota Electric will require all applicants to utilize the on-line application portal. To support the accurate time stamping of the queue position, Dakota Electric will not be allowing individually mailed or emailed applications. The on-line portal will also support improved communication with the member and is planned to allow the member to see the status of their application at any time.

Dakota Electric will post a PDF version of the applications on-line to allow the applicants to see what data is required for an application, but then will direct the applicant to the on-line portal, where the applicant enters the data into the on-line application system.

### Conclusion

Attached are Dakota Electric's updated compliance documents submitted for review and Commission approval. These documents include Dakota Electric specific Distributed Energy Resource Interconnection Process MN DIP-DEA and Distributed Energy Resource Interconnection Agreement MN DIA-DEA. Dakota Electric looks

forward to implementing the new procedures, forms and agreements and getting the online application portal up and operating.

If you or your staff have any questions about this updated compliance filing, please contact Craig Turner or Doug Larson.

# Sincerely,

/s/ Craig Turner
Craig Turner
Director of Engineering Services
651 463-6337
cturner@dakotaelectric.com

/s/ Doug Larson

Doug Larson Vice President of Regulatory Services 651-463-6258 dlarson@dakotaelectric.com

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# **Certificate of Service**

I, Cherry Jordan, hereby certify that I have this day served copies of the attached document to those on the following service list by e-filing, personal service, or by causing to be placed in the U.S. mail at Farmington, Minnesota.

Docket Nos. E-999/CI-01-1023 E-999/CI-16-521 E-111/M-18-711

Dated this 3rd day of January 2019

/s/ Cherry Jordan

Cherry Jordan



# State of Minnesota

# Distributed Energy Resources Interconnection Process

(MN DIPMN DIP-DEA)

(Adopted for use by Dakota Electric Association from the

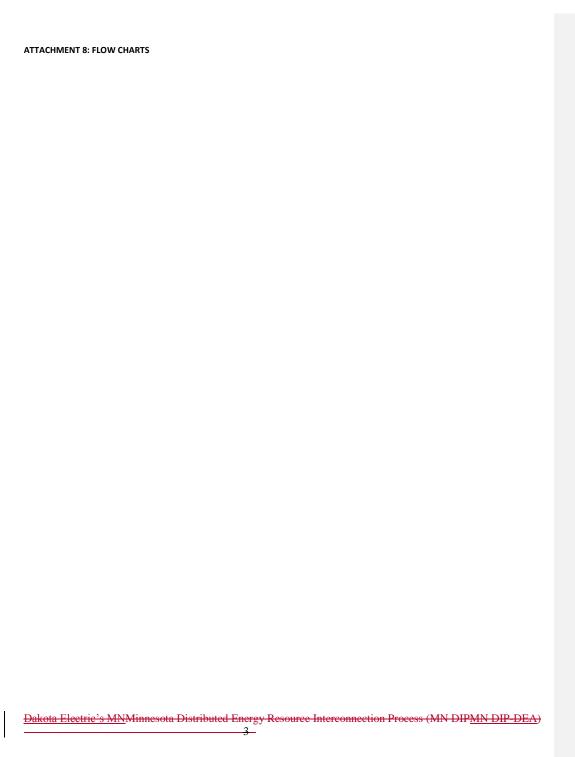
Minnesota Distributed Energy Resource Interconnection Process MN DIP)

v.2.3

1/3/2018

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### **Foreword**

The Minnesota Public Utilities Commission is charged by Minnesota Statute §216B.1611 to establish generic, statewide standards for the interconnection and parallel operation of distributed energy resources<sup>1</sup> of no more than 10 MW. In updating Minnesota's interconnection standards, we strive to:

- 1) Establish a practical, efficient interconnection process that is easily understandable for everyone involved;
- 2) Maintain a safe and reliable electric system at fair and reasonable rates;
- Give maximum possible encouragement of distributed energy resources consistent with protection of the ratepayers and the public;
- 4) Be consistent statewide and incorporate newly revised national standards;
- 5) Be technology neutral and non-discriminatory.

At a minimum, these standards must:

- To the extent possible, be consistent with industry and other federal and state operational and safety standards;
- Provide for the low-cost, safe, and standardized interconnection of distributed energy resources:
- Take into account differing system requirements and hardware; as well as, the overall demand load requirements of individual utilities;
- 4) Allow for reasonable terms and conditions, consistent with the cost and operating characteristics of the various technologies, so that a utility can reasonably be assured of the reliable, safe and efficient operation of the interconnected equipment;
- 5) Establish a standard interconnection agreement that sets forth the contractual terms under which a company and customer agree that one or more facilities may be interconnected with the company's utility system; and standard applications for interconnection and parallel operation with the utility system.

This standards document is modelled after the Federal Energy Regulatory Commission's Small Generator Interconnection Process (FERC SGIP), and explains the process to interconnect Distributed Energy Resources for parallel operation with the Area Electrical Power System (Area EPS); including templates for applications and study agreements. There are three companion documents: 1) Minnesota Distributed Energy Resource Interconnection Agreement (MN DIA-DEA); 2) Minnesota Distributed Energy Resource Technical Interconnection and Interoperability Requirements (MN DTIIR)<sup>2</sup>; and until updated or replaced 3) Attachment 6

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<sup>&</sup>lt;sup>1</sup> "Distributed Energy Resources" (DER) is emerging terminology used to capture both traditional "distributed generation" and storage technologies; however, this term is not currently defined in Minnesota statute or rules, and at times the Commission applies it to a broader category that includes demand-side management (controlling load like air conditioners or water heaters) and, in some cases, even energy efficiency and electric vehicles. For this document, the definition is consistent with IEEE 1547 and limited to generation and storage, and does not include DER that behave solely as load.

<sup>&</sup>lt;sup>2</sup> See MN DIPMN DIP-DEA

Rates from the statewide interconnection standards adopted in 2004 (September 28, 2004 Order in E-999/CI-01-1023.)

The Commission is grateful to the participants of the Distributed Generation Workgroup comprised of representatives of Minnesota's utilities, distributed energy resource industries, and consumers who informed this update of the state's interconnection standards. As these standards go into effect and more distributed energy resources interconnect with utility systems, the Commission expects this to be a living document.

### **Section 1. Application**

#### 1.1 Applicability

- 1.1.1 The Minnesota Distributed Energy Resources Interconnection Process (MN DIPMN DIP-DEA) applies to any Distributed Energy Resource (DER) no larger than 10 MW interconnecting to, and operating in parallel with, an Area EPS distribution Dakota Electric's system in Minnesota. See Minnesota Technical Requirements for more detail on what constitutes parallel operation. For the applicable interconnection process for DERs larger than 10 MW interconnected to, and operated in parallel with, an Area EPS distribution Dakota Electric's system in Minnesota, contact the Area EPS Dakota Electric for details on the applicable interconnection process. The exception is Distributed Energy Resource interconnections that are subject to Federal Energy Regulatory Commission (FERC) jurisdiction.
  - 1.1.1.1 An application to interconnect a certified<sup>5</sup>, inverter-based DER no larger than 20 kilowatts (kW) shall be evaluated under the Section 2 Simplified Process.
  - An application to interconnect a DER shall be evaluated under the Section 3 Fast Track Process if the eligibility requirements of Section 3.1 Applicability

### 1.1.1.2 Applicability are met.

1.1.1.3 An application to interconnect a DER that does not meet the Simplified Process or Fast Track Process eligibility requirements, or does not pass the review as described in either process, shall be evaluated under the Study Process.

Attachment 4: Certification Codes and Standards Attachment 4: Certification Codes and Standards regarding statewide technical requirements in the interim between adoption of MN-DIPMN DIP-DEA and adoption of an updated MN DTIIR.

5 See

Attachment 4 Attachment 4 and Attachment 5 for certification criteria.

Dakota Electric DER Pre-Application Report Form

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<sup>&</sup>lt;sup>3</sup> Minnesota Statute §216B.1611

<sup>&</sup>lt;sup>4</sup> The Federal Regulation and Development of Power Act (<u>16 U.S. Code Subchapter II</u>) outlines federal regulation of wholesale sales and transmission in interstate commerce and state regulation of generation, distribution, and retail sales.

- 1.1.1.4 Attachment 8 contains flow charts that provide an overview of the Simplified Process, the Fast Track Process, and the Study Process.
- 1.1.1.5 Prior to submitting an Interconnection Application, the Interconnection Customer may ask the Area EPS

  Operator Dakota Electric's Interconnection Coordinator whether the proposed interconnection is subject to these procedures. The Area EPS Operator Dakota Electric shall respond within fifteen (15) Business Days.
- 1.1.2 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms or the body of these procedures. All references to DER Nameplate Rating or maximum capacity as described in 5.14.36 herein are in alternating current (AC).
- 1.1.3 Neither these procedures nor the requirements included hereunder unless by mutual agreement of the Area EPS OperatorDakota Electric and the Interconnection Customer apply to DERs interconnected, approved for interconnection or Interconnection Applications submitted to by the Area EPS OperatorDakota Electric prior to June 17, 2019, and later deemed complete (provided these applications are later deemed complete following any applicable revisions no later than 60 days following this date). These procedures and the requirements hereunder shall apply to applications to modify existing DERs if the application to modify is submitted on or after June 17, 2019.
  - 1.1.3.1 Nothing in this MN-DIPMN DIP-DEA affects an Interconnection Customer's Queue Position assigned before the effective date of this MN-DIPMN DIP-DEA. The Parties agree to complete work on any interconnection study agreement executed prior to the effective date of this MN-DIPMN DIP-DEA in accordance with the terms and conditions of that interconnection study agreement. Any new studies or other additional work will be completed pursuant to this MN-DIPMN DIP-DEA.
- 1.1.4 Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices.
- 1.1.5 References in these procedures to an Interconnection Agreement are to the Uniform Statewide Contract or Minnesota Distributed Energy Resource Interconnection Agreement (MN DIAMN DIA-DEA).

1.1.5.1	the need followin	form Statewide Contract ( to use the MN DIAMN I g conditions are met and request the MN DIAMN	DIA-DEA if all of the Interconnection	ie		
	1.1.5.1.1	Certified equipment				
	1.1.5.1.2	<del>20</del> - <u>40</u> kW <i>ac</i> or less of	a <u>qualifying</u> DER C	apacity	Formatted: Underline	
	1.1.5.1.3	No Area EPS Dakota E are required to accomm		fications		
	1.1.5.1.4	Signed Uniform States		hment 1:	Formatted: Level 5	
		Pre-Application Repor	t Request Form			
Persons interested in finding ou resource to Dakota Electric's di application report request is to be the applicant with a Pre-Applicant with a Pre-Applicant with a Pre-Applicant equest and a \$300 fee is subm	stribution system be filled out as con ation Report withi	are to fill out this Pre-Applicat impletely as possible by the app in 15 business days once the co	ion Report Request. The licant. Dakota Electric	<u>will provide</u>	_	
<b>Distributed Energy Res</b>	ource Informa	ation				
Project Address:						
Citu			Stata	7in Codo		
<u>City:</u>			State:	Zip Code:		
City:  GPS Coordinates:		Nearby Cross Stre		Zip Code:		
GPS Coordinates:	oint of Common	Nearby Cross Stre	ets:	Zip Code:		
GPS Coordinates:			ets:	Zip Code:		
GPS Coordinates:  Location of the Proposed Po			ets:			
GPS Coordinates:  Location of the Proposed Po	apply):	Coupling (e.g. meter numb	ets: er or pole number):	orage		
GPS Coordinates:  Location of the Proposed Popular Type (Check all that a Solar Photovoltaic  Combined Heat and Pow	<i>apply):</i> ver	Coupling (e.g. meter numb	er or pole number):	orage		
GPS Coordinates:  Location of the Proposed Popular Type (Check all that a Solar Photovoltaic  Combined Heat and Pow	apply): ver e Rating of Propo	□ Wind □ Solar Thermal  Dised DER System (kWAC):	er or pole number):	orage ease specify)		
GPS Coordinates:  Location of the Proposed Pour DER Type (Check all that a Solar Photovoltaic  Combined Heat and Pow Total Aggregate Nameplate	e Rating of Propo	□ Wind □ Solar Thermal  Dised DER System (kWAC):	er or pole number):  □ Battery Sto	orage ease specify)	<u>ts</u>	

Please attach copy of site map for proposed project and any additional information that may be helpful in fulfilling the pre-application request. Site map should include true north, proposed project location including general layout, proposed service point location and major roadways.

Date Received:		Application Fee Received	: □ Yes	
Date Completed Pre-Application	Report Sent to Appl	icant:		
Point of Interconnection – A	dditional Informa	<u>ition</u>		
Is the proposed interconnection to the next section.)	o an existing service	? (If no, applicant is to skip	□ Yes	□ No
Customer Name:		<u>C</u>	Sustomer Account N	<u>lumber:</u>
Existing loads at site (kWAC):				
List future additional loads plann	ed for at site (in kW)	<u>AC):</u>		
				-
<b>Project Contact Information</b>				
Full Name:				
Name of Business:				
Name of Business:				
Street Address:				
			<del>-</del>	
<u>City:</u>		State:	Zip	Code:
Email:		Phone:		_
			-	
Payment and Agreement				

There is a non-refundable \$300 fee for the construction of a pre-application report. By signing this document, I acknowledge and understand that:

- Neither review of this application nor construction of any report shall begin until the full amount of the fee has been paid to Dakota Electric.
- Dakota Electric shall provide a report with only the available information on the proposed point of interconnection.
- The information provided by Dakota Electric may become outdated and not useful at the time of submission of a complete Interconnection Application.
- The confidentiality provision as listed in Section 5.9 of the Minnesota Distributed Energy Resource Interconnection Process MN DIP-DEA apply.
- Upon receipt of the report no guarantee is made by Dakota Electric that a future Interconnection
   Application will be approved for this proposed site.

Applicant Signature:	Date:

\*\*\*Please print clearly or type and return completed along with any additional documentation\*\*\*

# 1.1.5.1.41.1.5.1.5 Attachment 2: Simplified Application Formand Attachment 2: Simplified Application

propose in its tariff an increase to the size threshold for the application of the Uniform Statewide Contract as a replacement for the MN DIAMN DIADEA in its tariff. There may also be situations where the Interconnection Customer would need to sign both the Uniform Statewide Contract and the MN DIAMN DIA-DEA; such as, where the Nameplate Rating of the system is above the size threshold where the Uniform Statewide Contract replaces the MN DIAMN DIA-DEA but the DER qualifies for net metering (Minn. Stat.§216B.164 and Minn. R. Ch. 7835) under the Uniform Statewide Contract.

- 1.1.5.2 The reference to Interconnection Agreement also applies when the Area EPS Operator Dakota Electric and Interconnection Customer modify MN DIA-DEA-DEA with Commission approval.
- 1.1.6 The Area EPS Operator Dakota Electric and Interconnection Customer may jointly seek Commission approval of an amendment to the MN DIAMN DIA-DEA-DEA for use between them for a specific Interconnection Application in the following ways:
  - 1.1.6.1 File a Petition with the Commission, or
  - 1.1.6.2 File a Notice with the Commission of the proposed amendment. The Notice should include a copy of the amendment showing in redline format how the amendment would alter the MN-DIAMN DIA-DEA between the Area EPS Operator Dakota Electric and Interconnection Customer for the Interconnection Application at issue. If no objection or notice of intent to object is filed within 30 days, then the proposed amendment would be considered to be approved by the Commission. If there is a timely filed objection of notice of intent to object, then the proposed amendment would not be considered to have been approved by the Commission and could only be used if the Commission subsequently issues a written order authorizing its use.
- 1.1.7 Commission approval of an amendment to the Interconnection Agreement is not needed where such an amendment only addresses updating or correcting: 1) information specified in the Interconnection Application; 2) exhibits or attachments to the Interconnection Agreement as long as they are not additional agreements or requirements not covered in the MN DIPMN DIP-DEA on or MN Technical Requirements; or 3) information provided in the blank lines to the MN DIAMN DIA-DEA or Uniform Statewide Contract forms.

- 1.2 Online Applications and Electronic Submission
  - 1.2.1 Each Area EPS Operator Dakota Electric shall allow Pre-Application Report requests and Interconnection Applications to be submitted electronically; such as, through the Area EPS Operator Dakota Electric is website or via email. The Area EPS Operator Dakota Electric is may allow the Interconnection Agreement to be submitted electronically.
    - 1.2.1.1 The Area EPS Operator Dakota Electric may allow for electronic signatures to be used for the Pre-Application Report request, Interconnection Application and related agreements, including the Interconnection Agreement, and forms.
  - 1.2.2 Each Area EPS Operator Dakota Electric shall dedicate a page on their website or direct customers to a website with generic information on the MN DIP-DEA that the Area EPS Operator Dakota Electric finds comports with its process. The relevant information that shall be available to the Interconnection Customer via a website includes:
    - 1.2.2.1 The MN-DIPMN DIP-DEA and attachments in an electronically searchable format;
    - 1.2.2.2 The Area EPS Operator Dakota Electric's Interconnection Application and all associated forms in a format that allows for electronic entry of data;
    - 1.2.2.3 The Uniform Statewide Contract and the Area EPS

      Operator Dakota Electric's tariff version of the MN DIAMN

      DIA-DEA;
    - 1.2.2.4 Example documents; including, at a minimum, an example oneline diagram with required labels; and
    - 1.2.2.5 Contact information for the Area EPS Operator Dakota
      Electric's DER interconnection coordinator(s) and submission
      of Interconnection Applications, including email and phone
      number.

#### 1.3 Communications

1.3.1 The Area EPS OperatorDakota Electric shall designate a DER interconnection coordinator(s) and this person or persons shall serve as a single point of contact from which general information on the application process and on Affected System(s) can be obtained through informal request from the Interconnection Customer presenting a proposed project for a specific site. The name, telephone number, and e-mail address of such contact employee or office shall be made available on the Area EPS OperatorDakota Electric's Internet website in accordance with section 1.2.2.5. Dakota ElectricSome Area EPS Operators may have several DER Interconnection Coordinators assigned. The DER

Interconnection Coordinator shall be available to provide coordinator assistance with the Interconnection Customer, but is not responsible to directly answer or resolve all of the issues involved in review and implementation of the interconnection process and standards. Upon request, electric system information provided to the Interconnection Customer should include relevant system study results, interconnection studies, and other materials useful to an understanding of an interconnection at a particular point on the Area EPS Operator Dakota Electric's System, to the extent such provision does not violate the privacy policies of the Commission, confidentiality provisions of prior agreements or critical infrastructure requirements. This listing does not include a Pre-Application Report under Section 1.4. The Area EPS Operator Dakota Electric shall comply with reasonable requests for such information.

- 1.3.2 The Interconnection Customer may designate, on the Interconnection Application or in writing after the Application has been submitted, an Application Agent to serve as the single point of contact to coordinate with the DER Interconnection Coordinator on their behalf. Designation of an Application Agent does not absolve the Interconnection Customer from signing interconnection documents and the responsibilities outlined in the <a href="MN-DIPMN DIP-DEA">MN-DIPMN DIP-DEA</a> and Interconnection Agreement.
- 1.3.3 Engineering Communication: Upon request of either party or the Commission, for the purpose of exchanging information regarding an active Interconnection Application, the Area EPS Operator Dakota Electric and the Interconnection Customer shall each identify one point of contact with technical expertise for their organizations.

### 1.4 Pre-Application Report

- 1.4.1 In addition to the information described in section 1.3.1, which may be provided in response to an informal request, an Interconnection Customer may submit a formal written request form along with a non-refundable fee of up to \$300 for a Pre-Application Report on a proposed project at a specific site. The Area EPS OperatorDakota Electric shall provide the data described in section 1.4.2 to the Interconnection Customer within fifteen (15) Business Days of receipt of the completed request form and payment of the up to \$300 fee. The Pre-Application Report produced by the Area EPS OperatorDakota Electric is non-binding, does not confer any rights, and the Interconnection Customer must still successfully apply to interconnect to the Area EPS OperatorDakota Electric's system. The written Pre-Application Report request form shall include the information in sections 1.4.1.1 through 1.4.1.8 below to clearly and sufficiently identify the location of the proposed Point of Common Coupling.
  - 1.4.1.1 Project contact information, including name, address, phone number, and email address.
  - 1.4.1.2 Project location (street address with nearby cross streets and town). Interconnection Customer may choose to also provide an aerial map or GPS coordinates for increased accuracy.

- 1.4.1.3 Meter number, pole number, or other equivalent information identifying proposed Point of Common Coupling, if available.
- 1.4.1.4 DER type(s) (e.g., solar, wind, combined heat and power, storage, solar + storage, etc.).
- 1.4.1.5 Nameplate Rating (alternating current kW).
- 1.4.1.6 Single or three phase DER configuration.
- 1.4.1.7 Stand-alone generator (no onsite load, not including station service Yes or No?).
- 1.4.1.8 Is new service requested? Yes or No? If there is existing service, include the customer account number, site minimum and maximum current or proposed electric loads in kW (if available) and specify how the load is expected to change.
- 1.4.2 Using the information provided in the Pre-Application Report request form in section 1.4.1, the Area EPS OperatorDakota Electric will identify the substation/area bus, bank or circuit likely to serve the proposed Point of Common Coupling. This selection by the Area EPS OperatorDakota Electric does not necessarily indicate, after application of the screens and/or study, that this would be the circuit the project ultimately connects to. The Interconnection Customer must request additional Pre-Application Reports if information about multiple Points of Common Coupling is requested. Subject to 1.4.3, the Pre-Application Report will include the following information:
  - 1.4.2.1 Total capacity (in megawatts (MW)) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed Point of Common Coupling.
  - 1.4.2.2 Existing aggregate generation capacity (in MW) interconnected to a substation/area bus, bank or circuit (i.e., amount of generation online) likely to serve the proposed Point of Common Coupling.
  - 1.4.2.3 Aggregate queued generation capacity (in MW) for a substation/area bus, bank or circuit (i.e., amount of generation in the queue) likely to serve the proposed Point of Common Coupling.
  - 1.4.2.4 Available capacity (in MW) of substation/area bus or bank and circuit likely to serve the proposed Point of Common Coupling (i.e., total capacity less the sum of existing aggregate generation capacity and aggregate queued generation capacity).
  - 1.4.2.5 Substation nominal distribution voltage and/or transmission nominal voltage if applicable.

1.4.2.6	Nominal distribution circuit voltage at the proposed Point of Common Coupling.
1.4.2.7	Approximate circuit distance between the proposed Point of Common Coupling and the substation.
1.4.2.8	Relevant line section(s) actual or estimated peak load and minimum load data, including daytime minimum load as described in section 3.4.4.1 below and absolute minimum load, when available.
1.4.2.9	Whether the Point of Common Coupling is located behind a line voltage regulator.
1.4.2.10	Number and rating of protective devices and number and type (standard, bi-directional) of voltage regulating devices between the proposed Point of Common Coupling and the substation/area. Identify whether the substation has a load tap changer.
1.4.2.11	Number of phases available on <u>Dakota Electric's the Area EPS</u> medium voltage system at the proposed Point of Common Coupling. If a single phase, distance from the three-phase circuit.
1.4.2.12	Limiting conductor ratings from the proposed Point of Commor Coupling to the distribution substation.
1.4.2.13	Whether the Point of Common Coupling is located on a spot network, grid network, or radial supply.
1.4.2.14	Based on the proposed Point of Common Coupling, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.

- 1.4.3 The Pre-Application Report need only include existing data. A request for a Pre-Application Report does not obligate the Area EPS Operator Dakota Electric to conduct a study or other analysis of the proposed DER in the event that data is not readily available. If the Area EPS Operator Dakota Electric cannot complete all or some of a Pre-Application Report due to lack of available data, the Area EPS Operator Dakota Electric shall provide the Interconnection Customer with a Pre-Application Report that includes the data that is available. The confidentiality provisions found in 5.9 apply to Pre-Application Reports.

impacts since there are many variables studied as part of the interconnection review process. The distribution system is dynamic and subject to change, and data provided in the Pre-Application Report may become outdated at the time of the submission of the complete Interconnection Application. Notwithstanding any of the provisions of this section, the Area EPS Operator Dakota Electric shall, in good faith, include data in the Pre-Application Report that represents the best available information at the time of reporting.

### 1.5 <u>Interconnection Application</u>

The Interconnection Customer shall submit an Interconnection Application to the Area EPS Operator Dakota Electric, together with the processing fee or deposit specified in the Interconnection Application. Additional fees or deposits for the interconnection process shall not be required, except as otherwise specified in these procedures. Application form templates are available in Attachment 2: Simplified Application FormAttachment 2: Simplified Application Report Request Form

### **Pre-Application Report Request**

Persons interested in finding out the additional information regarding the interconnection of a distributed energy resource to Dakota Electric's distribution system are to fill out this Pre-Application Report Request. The pre-application report request is to be filled out as completely as possible by the applicant. Dakota Electric will provide the applicant with a Pre-Application Report within 15 business days once the completed Pre-Application Report Request and a \$300 fee is submitted to Dakota Electric.

Request and a \$500 fee is submitted to Dakota	a Electric.				
<b>Distributed Energy Resource Infor</b>	mation				
Project Address:					
<u>City:</u>		State:	Zi	ip Code:	
GPS Coordinates:	Nearby (	Cross Streets:			
Location of the Proposed Point of Comn	non Coupling (e.g. mo	eter number or pole 1	number):		
		-	<del></del>		
DER Type (Check all that apply):					
☐ Solar Photovoltaic	□ Wind		Battery Storage		
☐ Combined Heat and Power	☐ Solar Thermal		Other (please s	pecify)	
Total Aggregate Nameplate Rating of Pr	coposed DER System	(kWAC):			
			1		
Phase Configuration of Proposed DER S	<u>System</u>		☐ Single	☐ Th	<u>iree</u>
Service Voltage of Proposed DER Syste	<u>m</u>				Volts

fulfilling the pre-application req	uest. Site map should in		sed project locat	
<u>including general layo</u>	ut, proposed service po	oint location and major i	roadways.	
For Office Use Only				
Date Received:	Ap	pplication Fee Received:	☐ Yes	
Date Completed Pre-Application F	Report Sent to Applicant	<u>t:</u>		
<u>Point of Interconnection – Ad</u>	<u>ditional Information</u>	1		
<u>Is the proposed interconnection to</u> to the next section.)	an existing service? (If	no, applicant is to skip	☐ Yes	□ No
Customer Name:		C	ustomer Account	Number
<u>Customer ryame.</u>			ustomer Account	rumber.
Existing loads at site (kWAC):				
Existing loads at site (kWAC):				
Existing loads at site (kWAC):  List future additional loads planne	d for at site (in kWAC).	<u>.</u>		
	d for at site (in kWAC).	£		
List future additional loads planned	d for at site (in kWAC).	<u>:</u>		
List future additional loads planned Project Contact Information	d for at site (in kWAC).			
List future additional loads planned	d for at site (in kWAC).			_
List future additional loads planned Project Contact Information	d for at site (in kWAC).	<u>:</u>		
List future additional loads planned  Project Contact Information  Full Name:	d for at site (in kWAC).			
List future additional loads planned  Project Contact Information  Full Name:	d for at site (in kWAC).	<u>:</u>		
Project Contact Information Full Name:  Name of Business:  Street Address:	d for at site (in kWAC).			
List future additional loads planned  Project Contact Information  Full Name:  Name of Business:	d for at site (in kWAC).	State:	Zi	p Code:
Project Contact Information Full Name:  Name of Business:  Street Address:  City:	d for at site (in kWAC).	State:		p Code:
Project Contact Information Full Name:  Name of Business:  Street Address:	d for at site (in kWAC).			p Code:
Project Contact Information Full Name:  Name of Business:  Street Address:  City:	d for at site (in kWAC).	State:		p Code:

There is a non-refundable \$300 fee for the construction of a pre-application report. By signing this document, I acknowledge and understand that:

- Neither review of this application nor construction of any report shall begin until the full amount of the fee has been paid to Dakota Electric.
- Dakota Electric shall provide a report with only the available information on the proposed point of interconnection.
- The information provided by Dakota Electric may become outdated and not useful at the time of submission of a complete Interconnection Application.
- The confidentiality provision as listed in Section 5.9 of the Minnesota Distributed Energy Resource Interconnection Process MN DIP-DEA apply.
- Upon receipt of the report no guarantee is made by Dakota Electric that a future Interconnection
   Application will be approved for this proposed site.

Applicant Signature:	Date:

\*\*\*Please print clearly or type and return completed along with any additional documentation\*\*\*

- 1.5.1 <u>Attachment 2</u> and Attachment 3. <u>The Area EPS Operator Dakota Electric</u>'s tariff shall include specific fees for Simplified Process, Fast Track Process, and Study Process consistent with:
  - 1.5.1.1 The processing fee for the Simplified Process Application shall be up to \$100.
  - 1.5.1.2 For certified, Fast Track Process eligible applications, the processing fee shall be up to \$100 + \$1/kW. For non-certified Fast Track Process eligible applications, the processing fee shall be up to \$100 + \$2/kW.
  - 1.5.1.3 For an Interconnection Application that is not eligible or does not apply for Simplified Process or Fast Track Process, the processing fee shall be a down payment not to exceed \$1,000 plus \$2.00 per kW toward the deposit required for the study(s) under Section 4 Study Process.
  - 1.5.1.4 Interconnection Applications shall contain a single line diagram and site diagram. A signature from a professional engineer licensed in Minnesota shall be required when: 1) Certified equipment is greater than 250 kW; or 2) non-certified equipment is greater than 50 kW.
- 1.5.2 The Interconnection Application shall be date- and time-stamped upon initial and, if necessary, resubmission receipt. Unless Section 2 Simplified Process applies, the Interconnection Customer shall be notified of receipt by the Area EPS Operator Dakota Electric within three (3) Business Days of receiving the Interconnection Application. The Area EPS Operator Dakota Electric shall notify the Interconnection Customer within ten (10) Business Days of the receipt of the Interconnection Application as to whether the Interconnection Application is complete or incomplete. If the Interconnection Application is incomplete, the Area EPS Operator Dakota Electric shall provide along with the notice that the Interconnection Application is incomplete, a written list detailing all information that must be provided to complete the Interconnection Application. The Interconnection Customer will have ten (10) Business Days after receipt of the notice to submit all of the listed information. If the Interconnection Customer does not provide the listed information within the deadline the Interconnection Application will be deemed withdrawn. An Interconnection Application will be deemed complete upon submission of documents adhering to Minnesota Technical Requirements and containing the listed information to the Area EPS Operator Dakota Electric. The Area EPS Operator Dakota Electric will have five (5) Business Days to review the additional material and notify the Interconnection Customer if the Interconnection Application is deemed complete. The date-and time- stamp of receipt of a complete Interconnection Application shall be accepted as the qualifying date for the purposes of establishing queue position as described in section 1.8.

- 1.6 Modification of the Interconnection Application or a DER Interconnection
  - 1.6.1 At any time after an Interconnection Application is deemed complete, including after the receipt of Fast Track, supplemental review, system impact study, and/or facilities study results, the Interconnection Customer, the Area EPS OperatorDakota Electric, or the Affected System owner may identify modifications to the planned Interconnection that may improve the costs and benefits (including reliability) of the Interconnection, and/or the ability of the Area EPS OperatorDakota Electric to accommodate the Interconnection. The Interconnection Customer shall submit to the Area EPS OperatorDakota Electric, in writing, all proposed modifications to any information provided in the Interconnection Application. Neither the Area EPS OperatorDakota Electric nor the Affected System operator may unilaterally modify the Interconnection Application.
  - 1.6.2 Within ten (10) Business Days of receipt of a proposed modification, the Area EPS Operator Dakota Electric shall evaluate whether a proposed modification to either an Interconnection Application or an existing DER Interconnection constitutes a Material Modification. If applicable, the Area EPS Operator Dakota Electric shall make Reasonable Effort to consult with the Affected System owner. The definition in Error! Reference source not found. Glossary of Terms includes examples of what does and does not constitute a Material Modification.
    - 1.6.2.1 If the proposed modification is determined to be a Material Modification, then the Area EPS Operator Dakota Electric shall notify the Interconnection Customer in writing that the Customer may: 1) withdraw the proposed modification; or 2) proceed with a new Interconnection Application for such modification. The Interconnection Customer shall provide its determination in writing to the Area EPS Operator Dakota Electric within ten (10) Business Days after being provided the Material Modification determination results. If the Interconnection Customer does not provide its determination, the Customer's Application shall be deemed withdrawn.
    - 1.6.2.2 If the proposed modification is determined not to be a Material Modification, then the Area EPS Operator Dakota Electric shall notify the Interconnection Customer in writing that the modification has been accepted and that the Interconnection Customer shall retain its eligibility for interconnection, including its place in the interconnection queue.
  - 1.6.3 Any dispute as to the Area EPS Operator Dakota Electric's determination that a modification constitutes a Material Modification shall proceed in accordance with the dispute resolution provisions in section 5.3 of these procedures.
  - 1.6.4 Any modification to machine data, equipment configuration or to the interconnection site of the DER not agreed to in writing by the Area EPS

Operator Dakota Electric and the Interconnection Customer may be deemed a withdrawal of the Interconnection Application and may require submission of a new Interconnection Application, unless proper notification of each Party by the other as described in sections 1.6.1 and 1.6.2.

### 1.7 Site Control

Documentation of site control must be submitted with the Interconnection Application. Site control may be demonstrated through providing documentation showing any of the following:

- 1.7.1 Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the DER;
- 1.7.2 An option to purchase or acquire a leasehold site for such purpose; or
- 1.7.3 An exclusivity or other business relationship between the Interconnection
  Customer and the entity having the right to sell, lease, or grant the Interconnection
  Customer the right to possess or occupy a site for such purpose; or
- 1.7.4 For DERs utilizing the Section 2 Simplified Process, proof of site control may be demonstrated by the site owner's signature on the Interconnection Application.

#### 1.8 Queue Position

- 1.8.1 Queue Position is assigned by the Area EPS based on when the Interconnection Application is deemed complete as described in section 1.5.2. The Queue Position of each Interconnection Application will be used to determine the cost responsibility for the Upgrades necessary to accommodate the interconnection. The Queue Position also establishes conditional interconnection capacity for an Interconnection Customer, contingent upon all requirements of the MN DIPMN DIP-DEA and MN Technical Requirements being met.
- 1.8.2 Subject to the provisions in sections 1.5, 1.6, and 1.7, the DER shall retain the Queue Position assigned to their Interconnection Application throughout the review process for the purpose of determining cost responsibility and conditional interconnection capacity, including when moving through the processes covered by Section 2 Simplified Process and Section 3 Fast Track Process. Failure by the Interconnection Customer to meet the time frames outlined in these procedures or request a timeline extension shall result in a withdrawal of the Interconnection Application. The Area EPS shall notify the Interconnection Customer of the missed time frame with an opportunity to request a timeline extension as defined in section 5.2.3 before the Interconnection Application is deemed withdrawn.
- 1.8.3 The Area EPS Operator Dakota Electric shall maintain a single, administrative queue and may manage the queue by geographical region (i.e. feeder, substation, etc.) This administrative queue shall be used to address Interconnection Customer inquiries about the queue process. If the Area EPS Operator Dakota Electric and the

Interconnection Customer(s) agree, Interconnection Applications may be studied in clusters for the purpose of the system impact study; otherwise, they will be studied serially.

- 1.8.4 Each Area EPS Operator that has received at least forty (40) complete Interconnection Applications, including Simplified Process Applications, in a year shall maintain a public interconnection queue, available in a sortable spreadsheet format on its website, which it shall update on at least a monthly basis unless no changes to the spreadsheet have occurred in that month. The date of the most recent update shall be clearly indicated.
  - 1.8.4.1 At a minimum, the following shall be included in the public interconnection queue:

1.8.4.1.1	Application or Queue Number
1.8.4.1.2	Date Application Deemed Complete
1.8.4.1.3	Interconnection Process Track (Simplified, Fast Track, or Study Process)
1.8.4.1.4	Proposed DER Capacity (Nameplate Rating unless limited as defined in 5.14.3)
1.8.4.1.5	DER type (technology)
1.8.4.1.6	Proposed DER Location by geographic region (i.e. by feeder or line section)
1.8.4.1.7	Status of the Application's progress through the process (e.g. Initial Review, Supplemental Review, Facilities Study, Construction, Inspection, etc.)

# **Section 2. Simplified Process**

# 2.1 Applicability

2.1.1 For Certified, inverter-based DERs with a DER Capacity of 20 kW ac or less: The Area EPS Operator Dakota Electric shall comport with the Simplified Process, including the time frames described in that process. Simplified Process eligibility does not imply or indicate that a DER will pass the Initial Review Screens, failure to pass the screens will route the application to the Fast Track Process.

Certified Equipment - UL 1741 listing is a common form of DER inverter certification. See

2.1.2 Attachment 4: Certification Codes and StandardsAttachment 4: Certification
Codes and Standards and Attachment 5: Certification of Distributed Energy
Resource EquipmentAttachment 5: Certification of Distributed Energy Resource
Equipment.

# 2.2 <u>Simplified Process Application Review Process</u>

- 2.2.1 The Interconnection Customer with an eligible DER shall complete the Simplified Process Application and submit it and the application processing fee to the Area EPS Operator Dakota Electric. A Simplified Process Application template is provided in Attachment 2: Simplified Application FormAttachment 2: Simplified Application Form.
- 2.2.2 Within ten (10) Business Days of receipt of the Simplified Process Application, the Area EPS OperatorDakota Electric shall acknowledge to the Interconnection Customer receipt of the Simplified Application, evaluate the Simplified Process Application for completeness, and notify the Interconnection Customer whether the Simplified Process Application is or is not complete, and, if not, identify what material is missing. The Area EPS OperatorDakota Electric shall to the best of its ability identify all missing material and other errors or omissions at this time. The Interconnection Customer shall submit any additional material within five (5) Business Days of the Area EPS OperatorDakota Electric shall have an additional five (5) Business Days to review the additional material and notify the Interconnection Customer that the Simplified Process Application is complete.
- 2.2.3 The Area EPS Operator Dakota Electric shall determine if the DER can be interconnected safely and reliably using the Initial Review Screens Initial Review Screens Contained in the Fast Track Process at 3.2.1, and without construction of facilities by the Area EPS Operator Dakota Electric. The Area EPS Operator Dakota Electric has twenty (20) Business Days from receipt of a complete Simplified Process Application to complete this process and inform the Interconnection Customer of the results.

Unless the Area EPS Operator Dakota Electric determines and demonstrates that the DER cannot be interconnected safely and reliably or requires construction of facilities by the Area EPS Operator Dakota Electric, the Area EPS Operator Dakota Electric approves the Application and provides the Interconnection Customer an executable Uniform Statewide Contract or MN DIAMN DIA-DEA within five (5) days as described in sections 1.1.5.1 and 5.1.1.

If the Area EPS Operator Dakota Electric determines the DER can be connected safely and reliably only with construction of facilities by the Area EPS Operator Dakota Electric, the Area EPS Operator Dakota Electric shall follow the procedures set forth in Section 3.2.2.

If the Area EPS Operator Dakota Electric does not or cannot determine that the DER may be interconnected safely and reliably unless the Interconnection

Customer is willing to consider minor modifications or further study, the Area EPS Operator Dakota Electric shall follow the procedures set forth in Section 3.2.3.

### 2.3 Simplified Interconnection

- 2.3.1 the Interconnection Customer shall sign and return the Interconnection Agreement within thirty (30) Business Days<sup>7</sup> or may request an extension as described in Section 5.1.2 and 5.2. The Interconnection Customer must submit to the Area EPS OperatorDakota Electric either 1) a signed copy of the Uniform Statewide Contract, if applicable, which serves as both the power purchase agreement and Interconnection Agreement; or 2) the Interconnection Customer must submit a signed Uniform Statewide Contract, if applicable, and a separate MN DIAMN DIA-DEA as described in section 1.1.5..
  - 2.3.1.1 Upon receipt of the signed Interconnection Agreement, and then after fully executing it as provided for in Section 5.1.2, the Area EPS OperatorDakota Electric shall schedule and execute appropriate construction of facilities, if necessary, which shall be completed prior to the Interconnection Customer returning the Certificate of Completion. If construction of facilities is required by the Area EPS OperatorDakota Electric, the Area EPS OperatorDakota Electric shall notify the customer upon completion of construction.
- 2.3.2 After installation, the Interconnection Customer returns the Certificate of Completion to the Area EPS OperatorDakota Electric. Prior to parallel operation, and consistent with the MN DIPMN DIP-DEA, the Area EPS OperatorDakota Electric may inspect the DER for compliance with standards, which may include a witness test, and may schedule appropriate metering replacement, if necessary. The Area EPS OperatorDakota Electric is obligated to complete the witness test, if required, within ten (10) Business Days of the receipt of the Certificate of Completion. If the Area EPS OperatorDakota Electric does not inspect within ten (10) Business Days, the witness test is deemed waived.
- 2.3.3 Within three (3) Business Days of inspection or waiver of inspection, the Area EPS Operator Dakota Electric shall notify the Interconnection Customer in writing that interconnection of the DER has permission to operate. If the witness test is not satisfactory, the Area EPS Operator Dakota Electric has the right to disconnect the DER. The Interconnection Customer has no right to operate in parallel, except for optional testing not to exceed two hours, until permission to operate is granted by the Area EPS Operator Dakota Electric.

### **Section 3. Fast Track Process**

 $<sup>^{7}</sup>$  The 30-day timeframe in this step originates from Section 5.1.2 and does not represent a new step or timeframe.

### 3.1 Applicability

3.1.1 The Fast Track Process is available to an Interconnection Customer proposing to interconnect a DER with the Area EPS Operator Dakota Electric's Distribution System if the DER capacity does not exceed the size limits identified in this Section, including the table below and does not qualify for the Section 2 Simplified Process. Fast Track eligibility does not imply or indicate that a DER will pass the Fast Track Initial Review Screens in 3.2.1 or the Supplemental Review screens in 3.4 below.

Fast Track eligibility for DERs is determined based upon the generator type, the size of the generator, voltage of the line, and the location of and the type of line at the Point of Common Coupling. All synchronous and induction machines must be no larger than 2 MW to be eligible for Fast Track Process consideration. The Fast Track Process size limits are included in the table below.

Fast Track Eligibility for Distributed Energy Resources			
Line Voltage	Fast Track Eligibility <sup>8</sup> Regardless of Location	Fast Track Eligibility for certified, inverter-based DER on a Mainline <sup>9</sup> and ≤ 2.5 Electrical Circuit Miles from Substation <sup>10</sup>	
< 5 kV	≤ 500 kW	≤ 500 kW	
$\geq$ 5 kV and < 15 kV	≤ 1 MW	≤ 2 MW	
$\geq$ 15 kV and $<$ 30 kV	≤ 3 MW	≤ 4 MW	
≥ 30 kV and ≤ 69 kV	≤ 4 MW	≤ 5 MW	

# <u>In addition to the size threshold, the Interconnection Customer's proposed DER must meet</u> the codes, standards, and certification requirements of

<sup>&</sup>lt;sup>8</sup> Synchronous and induction machines eligibility is limited to no more than 2MW even when line voltage is greater than 15 kV.

<sup>&</sup>lt;sup>9</sup> For purposes of this table, a Mainline is the three-phase backbone of a circuit. It will typically constitute lines with wire sizes of 4/0 American wire gauge, 266 kcmil, 336.4 kcmil, 397.5 kcmil, 477 kcmil and 795 kcmil.

<sup>&</sup>lt;sup>10</sup> An Interconnection Customer can determine this information about its proposed interconnection location in advance by requesting a pre-application report pursuant to section 1.4.

3.1.2 Attachment 4Attachment 4 and Attachment 5 of these procedures, or the Area EPS

Operator Dakota Electric has reviewed the design or tested the proposed DER and is satisfied that it is safe to operate.

#### 3.2 Initial Review

Within 15 Business Days after the Area EPS Operator Dakota Electric notifies the Interconnection Customer it has received a complete Interconnection Application, the Area EPS Operator Dakota Electric shall perform an initial review using the screens set forth below, notify the Interconnection Customer of the results; including copies of the analysis and data underlying the Area EPS Operator Dakota Electric's determinations under the screens.

The technical screens listed in this section shall not preclude the Area EPS OperatorDakota Electric from seeking approval of tools that perform screening functions using different methodology given that the analysis is aimed at preventing the same voltage, thermal and protection limitations as the initial and supplemental review screens described below.

#### 3.2.1 Initial Review Screens

- 3.2.1.1 The proposed DER's Point of Common Coupling must be on a portion of the Area EPS Operator Dakota Electric's Distribution System.
- 3.2.1.2 For interconnection of a proposed DER to a radial distribution circuit, the aggregated generation, including the proposed DER, on the circuit shall not exceed 15% of the line section annual peak load as most recently measured. A line section is that portion of an Area EPS Operator's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line. The Area EPS OperatorDakota Electric may consider 100% of applicable loading (i.e. daytime minimum load for solar), if available, instead of 15% of line section peak load.
- 3.2.1.3 For interconnection of a proposed DER to the load side of network protectors, the proposed DER must utilize an inverter-based equipment package and, together with the aggregated other inverter-based DERs, shall not exceed the smaller of 5% of a network's maximum load or 50 kW.<sup>1</sup>
- 3.2.1.4 The proposed DER, in aggregation with other DERs on the distribution circuit, shall not contribute more than 10% to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed Point of Common Coupling.
- 3.2.1.5 The proposed DER, in aggregate with other Distributed Energy Resources on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed 87.5% of the short circuit interrupting capability; nor shall the interconnection be proposed for a circuit that already

<sup>&</sup>lt;sup>1</sup> Network protectors are protective devices used on secondary networks (spot and grid networks) to automatically disconnect its associated transformer when reverse power flow occurs. Secondary networks are most often used in densely populated downtown areas.

exceeds 87.5% of the short circuit interrupting capability.

3.2.1.6 Using the table below, determine the type of interconnection to a primary distribution line. This screen includes a review of the type of electrical service provided to the Interconnecting Customer, including line configuration and the transformer connection to limit the potential for creating over-voltages on the Area EPS Operator Dakota Electric's electric power system due to a loss of ground during the operating time of any anti-islanding function.

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Result/Criteria
Three-phase, three wire	3-phase or single phase, phase-	Pass screen
	to-phase	
Three-phase, four wire	Effectively-grounded 3 phase or	Pass screen
	Single-phase, line-to-neutral	

- 3.2.1.7 If the proposed DER is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed DER, shall not exceed 20 kW or 65% of the transformer nameplate rating.
- 3.2.1.8 If the proposed DER is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.
- 3.2.1.9 If the proposed DER is single-phase and is to be interconnected to a three-phase service, its Nameplate Rating shall not exceed 10% of the service transformer nameplate rating.
- 3.2.1.10 If the DER's Point of Common Coupling is behind a line voltage regulator<sup>2</sup>, the DER's Nameplate Rating shall be less than 250 kW.
- 3.2.2 If the proposed interconnection passes the screens, or if the proposed interconnection fails the screens, but <a href="the Area EPS OperatorDakota Electric">the Area EPS OperatorDakota Electric</a> determines that the DER may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the Interconnection Application shall proceed as follows:
  - 3.2.2.1 If the proposed interconnection requires no construction of facilities by the Area EPS Operator Dakota Electric on its own system, the Area EPS Operator Dakota Electric shall provide the Interconnection Customer an executed Interconnection Agreement within five (5) Business Days after the determination.
  - 3.2.2.2 If the proposed interconnection requires construction of any facilities, the Area EPS Operator Dakota Electric shall notify the Interconnection Customer of such requirement when it provides the Initial Review results and copies of the analysis and data underlying the Area EPS Operator Dakota Electric's

<sup>&</sup>lt;sup>2</sup> This screen does not include substation voltage regulators.

determinations under the screens and either: 1) provide a good faith cost estimate; or 2) require a facilities study pursuant to 4.4.1. Within five (5) Business Days, the Interconnection Customer shall inform the Area EPS OperatorDakota Electric if the Interconnection Customer elects to proceed with the proposed interconnection. If the Interconnection Customer makes such an election, the Area EPS OperatorDakota Electric shall either provide: i) an Interconnection Agreement, along with a non-binding good faith cost estimate and construction schedule for such upgrades, within twenty (20) Business Days after the Area EPS OperatorDakota Electric receives such an election or ii) a facilities study agreement pursuant to section 4.4.

3.2.3 If the proposed interconnection fails the screens, and the Area EPS Operator Dakota Electric does not or cannot determine from the Initial Review that the DER may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider minor modifications or further study, the Area EPS Operator Dakota Electric shall provide the Interconnection Customer the opportunity to attend a customer options meeting.

#### 3.3 <u>Customer Options Meeting</u>

If the Area EPS OperatorDakota Electric determines the Interconnection Application cannot be approved without either 1) supplemental review, other additional studies or actions; or 2) incurring significant cost to address safety, reliability, or power quality problems, the Area EPS OperatorDakota Electric shall notify the Interconnection Customer of that determination and provide copies of all directly pertinent data and analyses underlying its conclusion, subject to confidentiality provisions in Section 5.9 and where applicable limited by privacy rules. Within ten (10) Business Days of the Area EPS OperatorDakota Electric's determination, unless mutual agreement, the Area EPS OperatorDakota Electric and Interconnection Customer shall schedule a customer options meeting with the Interconnection Customer to review possible facility modifications, screen analysis and related results to determine what further steps are needed to permit the DER to be connected safely and reliably. At the time of notification of the Area EPS OperatorDakota Electric's determination, or at the customer options meeting, the Area EPS OperatorDakota Electric shall:

- 3.3.1 Offer to perform a supplemental review in accordance with section 3.4 and provide a non-binding good faith estimate of the costs of such review; or
- 3.3.2 Obtain the Interconnection Customer's agreement to continue evaluating the Interconnection Application under the Section 4 Study Process.

# 3.4 <u>Supplemental Review</u>

- 3.4.1 To accept the offer of a supplemental review, the Interconnection Customer shall agree in writing and submit a deposit for the estimated costs of the supplemental review in the amount of the Area EPS OperatorDakota Electric's good faith estimate of the costs of such review, both within fifteen (15) Business Days of the offer. If the written agreement and deposit have not been received by the Area EPS OperatorDakota Electric within that timeframe, the Interconnection Application shall continue to be evaluated under the Section 4 Study Process unless it is withdrawn by the Interconnection Customer.
- 3.4.2 The Interconnection Customer may specify with the written agreement and deposit the order in which the Area EPS Operator Dakota Electric will complete the supplemental review screens. The order specified shall be at the level of sections 3.4.4.1, 3.4.4.2, and 3.4.4.3.

- 3.4.3 The Interconnection Customer shall be responsible for the Area EPS Operator Dakota Electric's actual costs for conducting the supplemental review. The Interconnection Customer shall pay any review costs that exceed the deposit within twenty (20) Business Days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, the Area EPS Operator Dakota Electric will return such excess within twenty (20) Business Days of the invoice without interest.
- 3.4.4 Within thirty (30) Business Days following receipt of the deposit for a supplemental review, the Area EPS OperatorDakota Electric shall: 1) perform a supplemental review using the screens set forth below; 2) notify in writing the Interconnection Customer of the results; and 3) include with the notification copies of the analysis and data underlying the Area EPS OperatorDakota Electric's determinations under the screens. Unless the Interconnection Customer provided instructions for how to respond to the failure of any of the supplemental review screens below at the time the Interconnection Customer accepted the offer of supplemental review, the Area EPS OperatorDakota Electric shall notify the Interconnection Customer following the failure of any of the screens, or if it is unable to perform the screen in this section within two (2) Business Days of making such determination to obtain the Interconnection Customer's permission to: 1) continue evaluating the proposed interconnection under this section 3.4.4; 2) terminate the supplemental review and continue evaluating the DER under Section 4 Study Process; or 3) terminate the supplemental review upon withdrawal of the Interconnection Application by the Interconnection Customer. The Interconnection Customer shall respond with its choice within five (5) Business Days of notification from the Area EPS OperatorDakota Electric.
  - 3.4.4.1 Minimum Load Screen: Where 12 months of line section minimum load data (including onsite load but not station service load served by the proposed DER) are available, can be calculated, can be estimated from existing data, or determined from a power flow model, the aggregate DER capacity on the line section is less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed DER. If minimum load data is not available, or cannot be calculated, estimated or determined, the Area EPS Operator Dakota Electric shall include the reason(s) that it is unable to calculate, estimate or determine minimum load in its supplemental review results notification under section 3.4.4.
    - 3.4.4.1.1 The type of generation used by the proposed DER will be taken into account when calculating, estimating, or determining circuit or line section minimum load relevant for the application of screen 3.4.4.1. Solar photovoltaic (PV) generation systems with no battery storage use daytime minimum load (i.e., 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m. for PV\_systems utilizing tracking systems), while all other generation uses absolute minimum load.
    - 3.4.4.1.2 When this screen is being applied to a DER that serves some station service load, only the net injection into the Area EPS

      Operator Dakota Electric's electric system will be considered as part of the aggregate generation.
    - 3.4.4.1.3 Area EPS Operator will not consider as part of the aggregate generation for purposes of this screen DER capacity known to be already reflected in the minimum load data.

- 3.4.4.2 Voltage and Power Quality Screen: In aggregate with existing generation on the line section: (1) the voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions; (2) the voltage fluctuation is within acceptable limits as defined by Institute of Electrical and Electronics Engineers (IEEE) Standard 1453, or utility practice similar to IEEE Standard 1453; and (3) the harmonic levels meet IEEE Standard 519 limits.
- 3.4.4.3 Safety and Reliability Screen: The location of the proposed DER and the aggregate generation capacity on the line section do not create impacts to safety or reliability that cannot be adequately addressed without application of the Study Process. The Area EPS Operator Dakota Electric shall give due consideration to the following and other factors in determining potential impacts to safety and reliability in applying this screen.
  - 3.4.4.3.1 Whether the line section has significant minimum loading levels dominated by a small number of customers (e.g., several large commercial customers).
  - 3.4.4.3.2 Whether the loading along the line section is uniform or even.
  - 3.4.4.3.3 Whether the proposed DER is located in close proximity to the substation (i.e., less than 2.5 electrical circuit miles), and whether the line section from the substation to the Point of Common Coupling is a Main line rated for normal and emergency ampacity.
  - 3.4.4.3.4 Whether the proposed DER incorporates a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time.
  - 3.4.4.3.5 Whether operational flexibility is reduced by the proposed DER, such that transfer of the line section(s) of the DER to a neighboring distribution circuit/substation may trigger overloads or voltage issues.
  - 3.4.4.3.6 Whether the proposed DER employs equipment or systems certified by a recognized standards organization to address technical issues such as, but not limited to, islanding, reverse power flow, or voltage quality.
- 3.4.5 If the proposed interconnection passes the supplemental screens in sections 3.4.4.1, 3.4.4.2, and 3.4.4.3 above, or if the proposed interconnection fails the screens, but the Area EPS Operator Dakota Electric determines that the DER may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the interconnection shall proceed as follows:
  - 3.4.5.1 If the proposed interconnection passes the supplemental screens in sections 3.4.4.1, 3.4.4.2, and 3.4.4.3 above and does not require construction of facilities by the Area EPS OperatorDakota Electric on its own system, the Area EPS OperatorDakota Electric shall provide the Interconnection Customer an executable Interconnection Agreement within five (5) Business Days.

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- 3.4.5.2 If the proposed interconnection requires construction of any <a href="Area EPS"><u>Area EPS Operator Dakota Electric</u></a> shall notify the Interconnection Customer of such requirement when it provides the supplemental review results and either: 1) provide a good faith cost estimate; or 2) require a facilities study pursuant to 4.4.1. Within five (5) Business Days, the Interconnection Customer shall inform <a href="the Area EPS Operator Dakota Electric">the Area EPS Operator Dakota Electric</a> if the Interconnection Customer makes such an election, <a href="the Area EPS Operator Dakota Electric">the Area EPS Operator Dakota Electric</a> shall either provide: i) an Interconnection Agreement, along with a non-binding good faith cost estimate and construction schedule for such upgrades, within twenty (20) Business Days after <a href="the Area EPS Operator Dakota Electric">the Area EPS Operator Dakota Electric</a> receives such an election or ii) a facilities study agreement pursuant to section 4.4.
- 3.4.6 If the proposed interconnection fails the screens, and the Area EPS OperatorDakota Electric does not or cannot determine that the DER may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider minor modifications or further study, the Area EPS OperatorDakota Electric shall provide the Interconnection Customer the option of commencing the Section 4 Study Process. If the Interconnection Customer wishes to proceed it shall notify the Area EPS OperatorDakota Electric within fifteen (15) Business Days to retain its queue position.

#### **Section 4. Study Process**

### 4.1 Applicability

The Study Process shall be used by an Interconnection Customer proposing to interconnect its DER with the Area EPS Operator Dakota Electric's Distribution System if the DER 1) is not eligible for Section 2 Simplified Process review or Section 3 Fast Track Process review, or 2) did not pass the Fast Track Process or the Simplified Process. The application fee described in section 1.5.1.3 shall be applied to the application completeness review costs and the first deposit required in this section.

# 4.2 Scoping Meeting

- 4.2.1 A scoping meeting shall be held within ten (10) Business Days after the Interconnection Application is deemed complete or, if applicable, the Fast Track Process or Simplified Process has been completed and the Interconnection Customer has elected to continue with the Study Process, or as mutually agreed to by the Parties. The Area EPS Operator Dakota Electric and the Interconnection Customer will bring to the meeting personnel, including system engineers and other resources, as may be reasonably required to accomplish the purpose of the meeting.
- 4.2.2 The purpose of the scoping meeting is to discuss the Interconnection Application and review existing study results and relevant underlying data and assumptions relevant to the Interconnection Application. The Parties shall further discuss whether the Area EPS Operator Dakota Electric should perform a system impact study or studies, or proceed directly to a facilities study or an Interconnection Agreement. If the Area EPS Operator Dakota Electric determines there is no potential for Transmission System or Distribution System adverse system impacts, the Interconnection Application shall proceed directly to a facilities study or an executable Interconnection Agreement, as agreed to by the Parties.
- 4.2.3 The scoping meeting may be omitted by mutual agreement.

#### 4.3 System Impact Study

- 4.3.1 A system impact study shall identify and detail the electric system impacts that would result if the proposed DER(s) were interconnected without project modifications or electric system modifications, and to study potential impacts, including but not limited to those identified in the scoping meeting. A system impact study shall evaluate the impact of the proposed interconnection on the reliability of the electric system.
- 4.3.2 If the Parties agree at the scoping meeting that a system impact study should be performed, the Area EPS Operator Dakota Electric shall provide the Interconnection Customer, as soon as possible, but not later than five (5) Business Days after the scoping meeting, a system impact study agreement as defined in 4.3.3.
  - If the scoping meeting is omitted by mutual agreement or, if applicable, the Simplified Process or Fast Track Process has been completed and the Interconnection Customer has elected to continue with the Study Process, and a system impact study is required, the Area EPS Operator Dakota Electric shall provide the Interconnection Customer a system impact study agreement within ten (10) Business Days.
- 4.3.3 The system impact study agreement (Attachment 6) shall include an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study. If applicable, the agreement shall list any additional and reasonable technical data on the DER needed to perform the system impact study. The scope of and cost responsibilities for a system impact study are described in the attached system impact study agreement. A deposit of the good faith estimated costs for each system impact study shall be provided by the Interconnection Customer when it returns the study agreements. The additional and reasonable technical data, if applicable, shall be returned with the system impact agreement. Upon Interconnection Customer request, the Area EPS Operator Dakota Electric shall grant a time frame extension as described in 5.2.3 if additional technical data is requested.
- 4.3.4 In order to remain in consideration for interconnection, an Interconnection Customer who has requested a System Impact Study must return the executed system impact study agreement and pay the required study deposit within twenty (20) Business Days.
- 4.3.5 A System Impact Study shall be completed within thirty (30) Business Days after the system impact study agreement is signed by the Parties and delivered with deposit to the Area EPS Operator Dakota Electric. The results and, if necessary, facilities study agreement shall be delivered to the Interconnection Customer within five (5) Business Days of completion of the System Impact Study. Upon request, the Area EPS Operator Dakota Electric shall provide Interconnection Customer supporting documentation and workpapers developed in the preparation of the system impact study, subject to confidentiality arrangements consistent with these procedures and the System Impact Study agreement.
- 4.3.6 In instances where it is known by Dakota Electric, before the System Impact Study agreement is executed or during the process of completing the System Impact Study shows the potential for Transmission System adverse system impacts is identified, within five (5) Business Days following the identification of such impacts by the Area EPS Operator Dakota Electric, the Area EPS Operator Dakota Electric shall coordinate with the appropriate Transmission Provider to have the necessary studies completed to determine if the DER causes any adverse transmission impacts.

  Dakota Electric will coordinate with the Transmission Provider to provide to the Interconnection Customer a transmission system impact study agreement with the Transmission Provider.

- 4.3.7 In order to remain in consideration for interconnection, an Interconnection Customer must return the executed Transmission System impact study agreement within fifteen (15) Business Days.
- 4.3.8 A Transmission System impact study, if required, shall be completed and the results transmitted to the Interconnection Customer in as timely a manner as possible after the transmission system impact study agreement is signed by the Parties. The Area EPS Operator Dakota Electric shall be responsible for coordination with the Transmission Provider as needed. Affected Systems shall participate in the study and provide all information necessary to prepare the study.

#### 4.4 <u>Facilities Study</u>

4.4.1 If construction of facilities is required, a facilities study may be necessary to specify and estimate the cost of the equipment, engineering, procurement and construction work identified in Initial Review, Supplemental Review, or the Study Process to provide interconnection and interoperability of the DER with the Area EPS Operator Dakota Electric's Distribution System as required by Minnesota Technical Requirements. Interconnection Applications reviewed in the Simplified Process and Fast Track Process that require construction of facilities may be eligible, upon determination of the Area EPS Operator Dakota Electric, to forego a facilities study as described in section 3.2.2.2.

The Area EPS Operator Dakota Electric shall provide the Interconnection Customer a distribution facilities study agreement in tandem with the results of the Interconnection Customer's system impact study or, I frequired, Dakota Electric will coordinate with the local transmission supplier to provide a Transmission Facilities Study agreement for the Interconnection Customer. System impact study.

If no system impact study is required, but a <u>distribution</u> facilities study is required, then the Area <u>EPS Operator Dakota Electric</u> shall provide as soon as possible, but not later than five (5) Business Days after the scoping meeting, a <u>distribution</u> facilities study agreement.

If the scoping meeting is omitted by mutual agreement and no system impact study is required, but a facilities study is required, the Area EPS Operator Dakota Electric shall provide the Interconnection Customer a distribution facilities study agreement within ten (10) Business Days after the Interconnection Application is deemed complete and, if applicable, the Simplified Process or Fast Track Process has been completed.

- 4.4.2 The <u>distribution</u> facilities study agreement (Attachment 7) shall be accompanied by an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the facilities study. The scope of and cost responsibilities for the facilities study are described in the attached facilities study agreement. A deposit of the good faith estimated costs for the facilities study shall be provided by the Interconnection Customer at the time it returns the study agreement.
- 4.4.3 In order to remain under consideration for interconnection, the Interconnection Customer must return the executed <u>distribution</u> facilities study agreement and pay the required study deposit within fifteen (15) Business Days.
- 4.4.4 The <u>distribution</u> facilities study shall specify and estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the system impact study(s).

- 4.4.5 Design for any required Interconnection Facilities and/or Upgrades shall be performed under the distribution Facilities Study Agreement unless the Interconnection Application is processed under the provisions of section 3.2.2.2. However, in the event that the Interconnection Customer did not provide to the Area EPS Operator Dakota Electric all required Conditional Use Permits at the time of entering into the distribution Facilities Study Agreement, any such Design and/or Upgrades by the Area EPS Operator Dakota Electric may be delayed until after the Interconnection Customer has provided to the Area EPS Operator Dakota Electric all required Conditional Use Permits or provided a final design. The information in the Conditional Use Permits, or changes to the design, may result in significant modifications to the planned design and/or Upgrades. The Interconnection Customer may send to the Area EPS Operator Dakota Electric a redacted version of the Conditional Use Permit to ensure confidentiality, but any and all information that the Area EPS Operator Dakota Electric would reasonably need to perform an accurate distribution Facilities Study shall not be redacted. If necessary to comply with these requirements, a confidential version of the Conditional Use Permit may be provided to the Area EPS Operator Dakota Electric, with the confidential information being clearly marked and subject to the Confidentiality provisions in 5.9. The Area EPS Operator Dakota Electric may contract with consultants to perform activities required under the facilities study agreement. The Interconnection Customer and the Area EPS Operator Dakota Electric may agree to allow the Interconnection Customer to separately arrange for the design of some of the Interconnection Facilities. In such cases, facilities design will be reviewed and/or modified prior to acceptance by the Area EPS Operator Dakota Electric, under the provisions of the distribution Facilities Study Agreement. If the Parties agree to separately arrange for design and construction, and provided security and confidentiality requirements can be met, the Area EPS Operator Dakota Electric shall make sufficient information available to the Interconnection Customer in accordance with confidentiality and critical infrastructure requirements to permit the Interconnection Customer to obtain an independent design and cost estimate for any necessary facilities.
- 4.4.6 In cases where Upgrades are required, the <u>distribution</u> facilities study must be completed within forty-five (45) Business Days of the receipt of the executed facilities study agreement and deposit.
- 4.4.7 In cases where no Upgrades are necessary, and the required facilities are limited to Interconnection Facilities, the <u>distribution</u> facilities study must be completed within thirty (30) Business Days of the receipt of the executed facilities study agreement and deposit.
- 4.4.8 Once the <u>distribution</u> facilities study is completed, a draft facilities study report shall be prepared and transmitted to the Interconnection Customer. Upon request, <u>the Area EPS OperatorDakota Electric</u> shall provide Interconnection Customer supporting documentation and workpapers developed in the preparation of the <u>distribution</u> Interconnection Facilities Study, subject to confidentiality arrangements consistent with these procedures and the facilities study agreement.
- 4.4.9 Within ten (10) Business Days of providing a draft facilities study report to Interconnection Customer, the Area EPS Operator Dakota Electric and Interconnection Customer shall meet to discuss the results of the distribution facilities study unless the meeting is omitted by mutual agreement.
- 4.4.10 Interconnection Customer may, within twenty (20) Business Days after receipt of the draft report, provide written comments to the Area EPS Operator Dakota Electric, which the Area EPS Operator Dakota Electric shall address in the final report.
- 4.4.11 The Area EPS Operator Dakota Electric shall issue the final distribution facilities study report within fifteen (15) Business Days of receiving Interconnection Customer's comments or promptly

upon receiving Interconnection Customer's statement that it will not provide comments. The Area EPS Operator Dakota Electric may reasonably extend the time frame upon notice to the Interconnection Customer if the Interconnection Customer's comments require additional analyses or lead to significant modifications by the Area EPS Operator Dakota Electric prior to issuance of the final distribution facilities study report.

#### Section 5. Provisions that Apply to All Interconnection Applications

#### 5.1 <u>Interconnection Agreement</u>

- 5.1.1 The Area EPS Operator Dakota Electric shall provide the Interconnection Customer an executable Interconnection Agreement as described in section 1.1.5 within five (5) Business Days after the completion of all required review or study of the Interconnection Application unless sections 3.2.2.2, 3.4.5.1, 3.4.5.2 or 4.2.2 applies.
- 5.1.2 After receiving an Interconnection Agreement from the Area EPS Operator Dakota Electric, the Interconnection Customer shall have thirty (30) Business Days to sign and return the interconnection agreement. If the Interconnection Customer does not sign the interconnection agreement, request an extension pursuant to these procedures, or ask the Area EPS Operator Dakota Electric to file an unexecuted Interconnection Agreement with the Commission within thirty (30) Business Days, the Interconnection Application shall be deemed withdrawn. The Area EPS Operator Dakota Electric shall provide the Interconnection Customer a fully executed Interconnection Agreement within five (5) Business Days after receiving a signed interconnection agreement from the Interconnection Customer. After the Interconnection Agreement is signed by the Parties, the interconnection of the DER shall proceed under the provisions of the Interconnection Agreement, except to the extent these procedures remain applicable, including, but not limited to, sections 5.5, 5.6, and 5.7.
- 5.1.25.1.3 After completion of the installation, the Interconnection Customer returns the Certificate of Completion to Dakota Electric. Prior to parallel operation, and consistent with the MN DIP-DEA, Dakota Electric may inspect the DER for compliance with standards, which may include a witness test, and may schedule appropriate metering replacement, if necessary. For qualified systems 40kW or smaller, Dakota Electric is obligated to complete the witness test, if required, within ten (10) Business Days of the receipt of the Certificate of Completion. For these systems, if Dakota Electric does not inspect within ten (10) Business Days, the witness test is deemed waived. Error! Reference source not found. For systems larger than 40kW, Dakota Electric shall coordinate with the installer to complete inspection and/or testing in a reasonable time frame. The installer shall coordinate with Dakota Electric in support this inspection and testing.

### 5.2 <u>Time Frames and Extensions</u>

- 5.2.1 Response or Action Timeframes: Unless otherwise stated, all time frames are measured in Business Days. For purposes of measuring these time intervals and consistent with Minn. Stat. §645.15, the time shall be computed so as to exclude the first and include the last day of the prescribed or fixed period or duration of time. Any communication sent or received after 4:30 p.m. (local time in Saint Paul, Minnesota) or on a Saturday, Sunday, or Holiday shall be considered to have been sent on the next Business Day.
- 5.2.2 The Area EPS Operator Dakota Electric shall make Reasonable Efforts to meet all time frames provided in these procedures. If the Area EPS Operator Dakota Electric cannot meet a deadline

- provided herein, it must notify the Interconnection Customer in writing within three (3) Business Days after the deadline to explain the reason for the failure to meet the deadline, and provide an estimated time by which it will complete the applicable interconnection procedure in the process.
- 5.2.3 For applicable time frames described in these procedures, the Interconnection Customer may request in writing one extension equivalent to half of the time originally allotted (e.g., ten (10) Business Days for a twenty (20) Business Days original time frame) which the Area EPS Operator Dakota Electric may not unreasonably refuse. No further extensions for the applicable time frame shall be granted absent a Force Majeure Event or other similarly extraordinary circumstances.

#### 5.3 <u>Disputes</u>

- 5.3.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process and associated study and Interconnection Agreements according to the provisions of this article and Minnesota Administrative Rules 7829.1500-7829.1900. More information on the Commission's Consumer Affairs Office dispute resolution services is available on the Commission's website: <a href="https://mn.gov/puc/consumers/help/complaint/">https://mn.gov/puc/consumers/help/complaint/</a>
- 5.3.2 Prior to a written Notice of Dispute, the Party shall contact the other Party and raise the issue and the relief sought in an attempt to resolve the issue immediately.
- 5.3.3 In the event of a dispute, the disputing Party shall provide the other Party a written Notice of Dispute containing the relevant known facts pertaining to the dispute, the specific dispute and the relief sought, and express notice by the disputing Party that it is invoking the procedures under this article. The Interconnection Customer may utilize the Commission's Consumer Affairs Office's complaint/inquiry form and Informal Complaint dispute resolution process to assist with the written Notice of Dispute. The notice shall be sent to the non-disputing Party's email address and physical address set forth in the Interconnection Agreement or Interconnection Application, if there is no Interconnection Agreement. If the Interconnection Customer chooses not to utilize the Commission's Consumer Affair Office dispute resolution process, the Interconnection Customer shall provide an informational electronic copy of the Notice of Dispute to the Consumer Affairs Office at the Commission at consumer.puc@state.mn.us.
- 5.3.4 The non-disputing Party shall acknowledge the notice within three (3) Business Days of its receipt and identify a representative with the authority to make decisions for the non-disputing Party with respect to the dispute.
- 5.3.5 The non-disputing Party shall provide the disputing Party with relevant regulatory and/or technical details and analysis regarding the Area EPS Operator Dakota Electric interconnection requirements under dispute within ten (10) Business Days of the date of the Notice of Dispute. Within twenty (20) Business Days of the date of the Notice of Dispute, the Parties' authorized representatives will be required to meet and confer to try to resolve the dispute. Parties shall operate in good faith and use best efforts to resolve the dispute.
- 5.3.6 If a resolution is not reached in the thirty (30) Business Days from the date of the notice described in section 5.3.3, the Parties may 1) if mutually agreed, continue negotiations for up to an additional twenty (20) Business Days; or 2) either Party may request the Commission's Consumer Affairs Office provide mediation in an attempt to resolve the dispute within twenty (20) Business Days with the opportunity to extend this timeline upon mutual agreement. Alternatively, both Parties by

- mutual agreement may request mediation from an outside third-party mediator with costs to be shared equally between the Parties.
- 5.3.7 If the results of the mediation are not accepted by one or more Parties and there is still disagreement, the dispute shall proceed to the Commission's Formal Complaint process as described in Minn. Rules 7829.1700-1900 unless mutually agreed to continue with informal dispute resolution.
- 5.3.8 At any time, either Party may file a complaint before the Commission pursuant to Minn. Stat. §216B.164, if applicable, and Commission rules outlined in Minn. Rules Ch. 7829.

#### 5.4 <u>Interconnection Metering</u>

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

- 5.4.1 Pay upfront the cost of metering requirements for the DER. Any maintenance or replacement costs may be billed separately to the Interconnection Customer after these costs are incurred.
- 5.4.2 Pay a tariffed monthly charge for the actual, DER-related meter and metering-related costs. If no tariffed monthly charge is an exact match, then the closest applicable tariffed monthly charge shall apply; unless metering requirements are so different that individual case basis pricing should apply.

#### 5.5 Non-Warranty

The Area EPS Operator Dakota Electric 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, operated, installed or maintained by the Interconnection Customer, including without limitation the DER and any structures, equipment, wires, appliances or devices not owned, operated or maintained by the Area EPS Operator Dakota Electric.

- 5.6 Design, Procurement, Installation and Construction of Interconnection Facilities and Upgrades
  - 5.6.1 The Interconnection Customer shall pay for the actual cost of the Interconnection Facilities and Distribution Upgrades as described and itemized pursuant to the Interconnection Agreement and its attachments. If Network Upgrades are required, the actual cost of the Network Upgrades, including overheads, shall be borne by the Interconnection Customer pursuant to the Transmission Provider and associated agreement(s). As indicated in the Interconnection Agreement, the Area EPS OperatorDakota Electric shall provide a good faith cost estimate, including overheads, for the purchase and construction of the Interconnection Facilities, and Distribution Upgrades, and Network Upgrades, and provide a detailed itemization of such costs.
  - 5.6.2 The Interconnection Customer and the Area EPS Operator Dakota Electric shall agree on milestones for which each Party is responsible and list them in an attachment to the Interconnection Agreement. To the greatest extent possible, the Parties will identify all design,

procurement, installation and construction requirements associated with a project, and clear associated timelines, at the beginning of the design, procurement, installation and construction phase, or as early within the process as possible.

- 5.6.3 A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it shall immediately notify the other Party of the reason(s) for not meeting the milestone and 1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and 2) request appropriate amendments to the Interconnection Agreement and its attachments. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless 1) it will suffer significant uncompensated economic or operational harm from the delay, 2) attainment of the same milestone has previously been delayed, or 3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment. If the Party affected by the failure to meet a milestone disputes the proposed extension, the affected Party may pursue dispute resolution pursuant to 5.3.
- 5.6.4 At the option of the Area EPS Operator Dakota Electric, either the "Traditional Security" or the "Modified Security" method shall be used.
  - 5.6.4.1 Under the Traditional Security method, the Interconnection Customer shall provide reasonable adequate assurances of credit, including a letter of credit or personal guaranty of payment and performance from a creditworthy entity acceptable under the Area EPS Operator Dakota Electric credit policy and procedures for the unpaid balance of the estimated amount shown in Interconnection Agreement for the totality of all anticipated work or expense incurred by the Area EPS Operator Dakota Electric associated with the Interconnection Application. The payment for these estimated costs shall be as follows:
    - 5.6.4.1.1 1/3 of estimated costs shall be due no later than when the Interconnection Customer signs the Interconnection Agreement.
    - 5.6.4.1.2 An additional 1/3 of estimated costs shall be due prior to initial energization of the Generation System with the Area EPS

      Operator Dakota Electric.
    - 5.6.4.1.3 Remainder of actual costs, incurred by Area EPS Operator, shall be due within 30 days from the date the bill is mailed by the Area EPS Operator Dakota Electric after project completion.
  - Under the Modified Security method, at least twenty (20) Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Area EPS Operator Dakota Electric's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Area EPS Operator Dakota Electric, 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 Dakota Electric 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 Dakota Electric's

Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Area EPS Operator Dakota Electric under the Interconnection Agreement during its term.

- 5.6.4.3 The guarantee must be made by an entity that meets the creditworthiness requirements of the Area EPS Operator Dakota Electric, 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.
- 5.6.4.4 The letter of credit must be issued by a financial institution or insurer reasonably acceptable to the Area EPS Operator Dakota Electric and must specify a reasonable expiration date not sooner than sixty (60) Business Days (three calendar months) after the due date of the final accounting report and bill described in 5.6.6.
- 5.6.5 The Area EPS Operator Dakota Electric shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades described in the Interconnection Agreement on a monthly basis, or as otherwise agreed by the Parties in the interconnection agreement. The Interconnection Customer shall pay each bill within twenty-one (21) Business Days of receipt, or as otherwise agreed to by the Parties in the interconnection agreement.
- 5.6.6 Within eighty (80) Business Days (approximately four (4) calendar months) of completing the construction and installation of <a href="mailto:the-Area EPS Operator-Dakota Electric">the Area EPS Operator-Dakota Electric</a> shall provide the Interconnection Customer with a final accounting report of any difference between 1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and 2) the Interconnection Customer's previous aggregate payments to <a href="mailto:the-Area EPS Operator-Dakota Electric">the Area EPS Operator-Dakota Electric</a> for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, <a href="mailto:the-Area EPS Operator-Dakota Electric">the Area EPS Operator-Dakota Electric</a> shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to <a href="mailto:the-Area EPS Operator-Dakota Electric">the Area EPS Operator-Dakota Electric</a> within twenty (20) Business Days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under the Interconnection Agreement, <a href="mailto:the-Area EPS Operator-Dakota Electric">the Area EPS Operator-Dakota Electric</a> shall refund to the Interconnection Customer an amount equal to the difference within twenty (20) Business Days of the final accounting report.

# 5.7 <u>Inspection, Testing, Commissioning and Authorization</u>

- 5.7.1 The Interconnection Customer shall arrange for the inspection and testing of the DER and the Customer's Interconnection Facilities prior to interconnection pursuant to Minnesota Interconnection Technical Requirements. Commissioning tests of the Interconnection Customer's installed equipment shall be performed pursuant to applicable codes and standards pursuant to Minnesota Technical Requirements.
- 5.7.2 The Interconnection Customer shall notify the Area EPS OperatorDakota Electric of testing and inspection no fewer than five (5) Business Days in advance, or as may be agreed to by the Parties. Testing and inspection shall occur on a Business Day. The Area EPS OperatorDakota Electric may, at its own expense if not required in Minnesota Interconnection Technical Requirements, send qualified personnel to the DER site to inspect the interconnection and witness the testing. The

- Interconnection Customer shall provide the Area EPS Operator Dakota Electric a written results report.
- 5.7.3 The Area EPS Operator Dakota Electric shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Area EPS Operator Dakota Electric of the safety, durability, suitability, or reliability of the DER or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the DER.

# 5.8 <u>Authorization Required Prior to Parallel Operation</u>

- 5.8.1 Area EPS Operator shall use Reasonable Efforts to list applicable parallel operation requirements by attaching the Minnesota Interconnection Technical Requirements to the Interconnection Agreement. Additionally, the Area EPS OperatorDakota Electric shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. The Area EPS OperatorDakota Electric shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.
- 5.8.2 The Interconnection Customer shall not operate its DER in parallel with the Area EPS

  Operator Dakota Electric's Distribution System without prior written permission to operate authorization from the Area EPS Operator Dakota Electric. The Area EPS Operator Dakota Electric shall provide such authorization within three (3) Business Days from when the Area EPS

  Operator Dakota Electric receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements and all payments for issued bills under the Interconnection Agreement, System Impact Study Agreement, Facilities Study Agreement or Section 5.6.5 above that are past due have been paid in full. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

#### 5.9 Confidentiality

- 5.9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of these procedures, design, operating specifications, and metering data provided by the Interconnection Customer may be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such. If requested by either Party, the other Party shall provide in writing the basis for asserting that the information warrants confidential treatment. Parties providing a Governmental Authority trade secret, privileged or otherwise not public or nonpublic data under the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13, shall identify such data consistent with the Commission's September 1, 1999 Revised Procedures for Handling Trade Secret and Privileged Data, available online at: https://mn.gov/puc/puc-documents/#4
- 5.9.2 Confidential Information does not include information previously in the public domain with proper authorization, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be publicly divulged in an action to enforce these procedures. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party

providing that information, except to fulfill obligations under these procedures, or to fulfill legal or regulatory requirements that could not otherwise be fulfilled by not making the information public.

- Each Party shall hold in confidence and shall not disclose Confidential 5.9.2.1 Information, to any person (except employees, officers, representatives and agents, who agree to be bound by this section). Confidential Information shall be clearly marked as such on each page or otherwise affirmatively identified. If a court, government agency or entity with the right, power, and authority to do so, requests or requires either Party, by subpoena, oral disposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party with prompt notice of such request(s) or requirements(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of this Agreement. In the absence of a protective order or waiver the Party shall disclose such confidential information which, in the opinion of its counsel, the party is legally compelled to disclose. Each Party will use reasonable efforts to obtain reliable assurance that confidential treatment will be accorded any confidential information so furnished.
- 5.9.2.2 Critical infrastructure information or information that is deemed or otherwise designated by a Party as Critical Energy/Electric Infrastructure Information (CEII) pursuant to FERC regulation, 18 C.F.R. §388.133, as may be amended from time to time, may be subject to further protections for disclosure as required by FERC or FERC regulations or orders and the disclosing Party's CEII policies.
- 5.9.2.3 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.
- 5.9.2.4 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

#### 5.10 Insurance

5.10.1 At a minimum, the Interconnection Customer shall maintain, during the term of the Interconnection Agreement, general liability insurance, from a qualified insurance agency with a B+ or better rating by "Best" and with a combined single limit of not less than the limits described in the chart below.

Distributed Energy Resource System Size	Liability Insurance Requirement
≤ 40 kWac	\$300,000
> 40 kWac and ≤ 250 kWac	\$1,000,000
> 250 kWac and ≤ 5 MWac	\$2,000,000
> 5 MWac and ≤ 10 MWac	\$3,000,000

Such general liability insurance shall include coverage against claims for damages resulting from (i) bodily injury, including wrongful death; and (ii) property damage arising out of the Interconnection Customer's ownership and/or operation of the DER under this agreement

- 5.10.2 The general liability insurance required shall, by endorsement to the policy or policies, (a) include the Area EPS OperatorDakota Electric as an additional insured; (b) contain a severability of interest clause or cross-liability clause; (c) provide that the Area EPS OperatorDakota Electric shall not by reason of its inclusion as an additional insured incur liability to the insurance carrier for the payment of premium for such insurance; and (d) provide for twenty (20) business days' written notice to the Area EPS OperatorDakota Electric prior to cancellation, termination, alteration or material change of such insurance.
- 5.10.3 If the DER is connected to an account receiving residential service from the Area EPS Operator Dakota Electric and its system size is less than 40kW, then the endorsements required in Section 5.10.2 shall not apply.
- 5.10.4 The Interconnection Customer shall furnish the required insurance certificates and endorsements to the Area EPS OperatorDakota Electric prior to the initial operation of the DER. Thereafter, the Area EPS OperatorDakota Electric shall have the right to periodically inspect or obtain a copy of the original policy or policies of insurance.
- 5.10.5 Evidence of the insurance required in Section 5.10.1 shall state that coverage provided is primary and is not excess to or contributing with any insurance or self-insurance maintained by the Area EPS Operator Dakota Electric.
- 5.10.6 If the Interconnection Customer is self-insured with an established record of self-insurance, the Interconnection Customer may comply with the following in lieu of Sections 5.10.1 - 5.10.5.
  - 5.10.6.1 Interconnection Customer shall provide the Area EPS Operator Dakota Electric, at least twenty (20) days prior to the date of initial operation, evidence of an acceptable plan to self-insure to a level of coverage equivalent to that required under Section 5.10.1.
  - 5.10.6.2 If the Interconnection Customer ceases to self-insure to the level required hereunder, or if the Interconnection Customer is unable to provide continuing evidence of the ability to self-insure, the Interconnection Customer agrees to immediately obtain the coverage required under Section 5.10.1.
- 5.10.6.3 Failure of the Interconnection Customer or the Area EPS Operator Dakota Electric to enforce the minimum levels of insurance does not relieve the Dakota Electric's MNMinnesota Distributed Energy Resource Interconnection Process (MN DIP-DEA)

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Interconnection Customer from maintaining such levels of insurance or relieve the Interconnection Customer of any liability.

5.10.7 An Interconnection Customer's insurance requirements shall be limited to no more than an aggregate cap of \$35 million if the Interconnection Customer has multiple DER systems in the Area EPS OperatorDakota Electric's service territory.

#### 5.11 Comparability

The Area EPS Operator Dakota Electric shall receive, process and analyze all Interconnection Applications in a timely manner as set forth in this document. The Area EPS Operator Dakota Electric shall use the same Reasonable Efforts in processing and analyzing Interconnection Applications from all Interconnection Customers, whether the DER is owned or operated by the Area EPS Operator Dakota Electric, its subsidiaries or affiliates, or others.

#### 5.12 Record Retention

The Area EPS Operator Dakota Electric shall maintain for three years records, subject to audit, of all Interconnection Applications received under these procedures, the times required to complete Interconnection Application approvals and disapprovals, and justification for the actions taken on the Interconnection Applications.

### 5.13 Coordination with Affected Systems

The Area EPS OperatorDakota Electric shall coordinate the conduct of any studies required to determine the impact of the Interconnection Application on Affected Systems with Affected System operators and, if possible, include those results (if available) in its applicable interconnection study within the time frame specified in these procedures. The Area EPS OperatorDakota Electric will make Reasonable Effort to include the Affected System operator(s) in all relevant meetings held with the Interconnection Customer as required by these procedures. The Interconnection Customer will cooperate with the Area EPS OperatorDakota Electric and the Affected System operator(s) in all matters related to the conduct of studies and the determination of modifications to Affected Systems. Affected System operators shall cooperate with the Area EPS OperatorDakota Electric and Interconnection Customer(s) with whom interconnection has been requested in all matters related to the conduct of studies and the determination of modifications to Affected Systems.

#### 5.14 Capacity of the Distributed Energy Resource

- 5.14.1 If the Interconnection Application is for an increase in capacity for an existing DER, the Interconnection Application shall be evaluated on the basis of the new total alternating current ("AC") capacity of the Distributed Energy Resource. The maximum capacity of a Distributed Energy Resource shall be the Aggregate Nameplate Rating or may be limited as described in 5.14.3.
- 5.14.2 An Interconnection Application for a DER that includes a single or multiple energy production devices at a site for which the Interconnection Customer seeks a single Point of Common Coupling shall be evaluated on the basis of the Aggregate Nameplate Rating of the multiple DERs unless 5.14.3 applies.
- 5.14.3 If the maximum capacity of the DER(s) is limited (e.g., through use of a control system, power relay(s), or other similar device settings or adjustments), then the Interconnection Customer must

obtain the Area EPS OperatorDakota Electric's agreement that the manner in which the Interconnection Customer proposes to implement such a limit will effectively limit active power output so as to not adversely affect the safety and reliability of the Area EPS OperatorDakota Electric's system. Such agreement shall not to be unreasonably withheld. If the Area EPS OperatorDakota Electric does not so agree, then the Interconnection Application must be withdrawn or revised. Nothing in this section shall prevent an Area EPS Operator from considering an output higher than the limited output (e.g. Aggregate Nameplate Rating), if the limitations do not provide adequate assurance, when evaluating system impacts. See Minnesota Technical Requirements for more detail.

#### **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.

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

Certified Equipment - UL 1741 listing is a common form of DER inverter certification. See

Attachment 4: Certification Codes and StandardsAttachment 4: Certification Codes and Standards and Attachment 5: Certification of Distributed Energy Resource EquipmentAttachment 5: Certification of Distributed Energy Resource Equipment

Confidential Information – See MN DIPMN DIP-DEA 5.9

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

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

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

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

**Fast Track Process** – The procedure as described in Section 3 for evaluating an Interconnection Application for a DER that meets the eligibility requirements of section 3.1.

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

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

**Governmental Authority** – Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision,

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

**Interconnection Agreement** – The terms and conditions between the Area EPS Operator and Interconnection Customer (Parties). See <a href="MN DIP-DEA">MN DIP-DEA</a> Section 1.1.5 for when the Uniform Statewide Contract or <a href="MN DIA-DEA">MN DIA-DEA</a> applies.

Interconnection Application – The Interconnection Customer's request to interconnect a new or modified, as described in <a href="MN DIP-DEA">MN DIP-DEA</a> Section 1.6, DER. See <a href="Attachment 2: Simplified Application Form">Attachment 2: Simplified Application Form</a> and Attachment 3 Interconnection Application Form.

**Interconnection Customer** – The person or entity, including the Area EPS Operator, whom will be the owner of the DER that proposes to interconnect a DER(s) with the Area EPS Operator's Distribution System. The Interconnection Customer is responsible for ensuring the 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.

**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.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> 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

MN DIAMN DIA-DEA - The <u>Dakota Electric Association version of the Minnesota Distributed</u>
Energy Resource Interconnection Agreement. See <u>MN DIPMN DIP-DEA</u> Section 1.1.5 for when the Uniform Statewide Contract or <u>MN DIAMN DIA-DEA</u> applies.

MN DIPMN DIP-DEA – The Dakota Electric Association version of the Minnesota Distributed Energy Resource Interconnection Process. Statewide interconnection standards in this document.

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

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

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

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

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.

**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 <a href="MN DIAMN DIA-DEA">MN DIA-DEA</a>.

Party or Parties – The Area EPS Operator Dakota Electric 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.

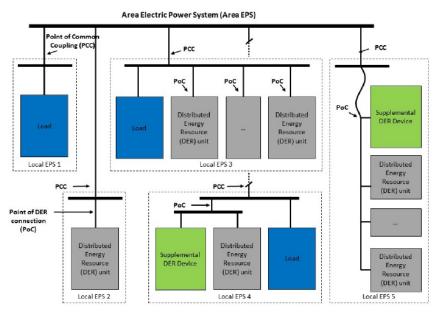


Figure 1: Point of Common Coupling and Point of DER Connection

(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 sections 1.5.2 and 1.8.

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

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

Simplified Process – The procedure for evaluating an Interconnection Application for a certified inverter-based DER no larger than 20 kW that uses the screens described in section 3.2. The Simplified Process includes simplified procedures. <a href="https://document.org/length/screens-based-larger-large

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

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

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

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

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

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

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

# **Attachment 1: Pre-Application Report Request Form**

Persons interested in finding out the additional information regarding the interconnection of a distributed energy resource to Dakota Electric's distribution system are to fill out this Pre-Application Report Request. The preapplication report request is to be filled out as completely as possible by the applicant. Dakota Electric will provide the applicant with a Pre-Application Report within 15 business days once the completed Pre-Application Report

<b>Distributed Energy Resource In</b>	nformation			
Project Address:				
City:		State:	Zir	Code:
City.		Suic.	24	coue.
GPS Coordinates:	Nearby Cross	s Streets:		
Location of the Proposed Point of C	ommon Coupling (e.g. meter r	number or pole numbe	r):	
DER Type (Check all that apply):				
☐ Solar Photovoltaic	□ Wind	☐ Batter	y Storage	
☐ Combined Heat and Power	☐ Solar Thermal	☐ Othe	r (please sp	ecify)
Total Aggregate Nameplate Rating of	of Proposed DER System (kW	AC):		
Phase Configuration of Proposed DI	ER System		Single	☐ Three
Service Voltage of Proposed DER S	ystem			Vol
Will this be a stand-alone generator not interconnected to onsite load (not including station service)?			□Yes	□ No
Please attach copy of site map for pro fulfilling the pre-application requ including general layou		ue north, proposed pr	oject locati	
For Office Use Only				
Date Received:	Application	Fee Received:	□ Yes	□ No
D . C . I . ID . I . I . D	port Sent to Applicant:			

Point of Interconnection – Additional Information				
Is the proposed interconnection to an existing service? (If no, applicant is to the next section.)	to skip	□ Yes	s 🗆 No	
Customer Name:	Cı	ustomer Acco	unt Number:	
Existing loads at site (kWAC):				
List future additional loads planned for at site (in kWAC):				
<b>Project Contact Information</b>				
Full Name:				
Name of Business:				
Street Address:				
City:	State:		Zip Code:	
Email:	Phone:			
Payment and Agreement				
<ul> <li>There is a non-refundable \$300 fee for the construction of a pre-application report. By signing this document, I acknowledge and understand that: <ul> <li>Neither review of this application nor construction of any report shall begin until the full amount of the fee has been paid to Dakota Electric.</li> <li>Dakota Electric shall provide a report with only the available information on the proposed point of interconnection.</li> <li>The information provided by Dakota Electric may become outdated and not useful at the time of submission of a complete Interconnection Application.</li> <li>The confidentiality provision as listed in Section 5.9 of the Minnesota Distributed Energy Resource Interconnection Process MN DIP-DEA apply.</li> <li>Upon receipt of the report no guarantee is made by Dakota Electric that a future Interconnection Application will be approved for this proposed site.</li> </ul> </li> </ul>				
Applicant Signature:	Da	nte:		
***Please print clearly or type and return completed along with a	any addi	itional docun	nentation***	

Requests for an Interconnection Pre-Application Report shall include the information id	lentified in
Sections 1.4.1.1 through 1.4.1.8 of the Minnesota Distributed Energy Resource Intercor	
Process (MN DIP) (and as provided in the fields below) to clearly and sufficiently ident	
location of the proposed Point of Common Coupling and relevant project details.	iry the
rocation of the proposed Font of Common Coupling and relevant project detains.	
Additionally, a non-refundable processing fee of (not to exceed \$300) is re	auired as
specified in Section 1.4.1 of the MN DIP.	quired as
specified in occition 1.4.1 of the MTV DIT.	
Upon receipt of a complete Request Form (including site map) and processing fee, the Appearance of the data described 1.4.2 as is pre-existing and available within 15 business days. A Pre-Application Report not obligate the Area Pes Operator Dakota Electric to conduct a study or other analysis representation in the suitable of the Area Pes Operator Dakota Electric to conduct a study or other analysis.	in Section request does
proposed project if data is not available.	
1. Requestor Contact Information:	
Name:	
Company Name (if applicable):	
Street Address:	
City/State/Zip:	
Phone Number:	
Email Address:	
2. Project Information:	
a) Project Name:	
d) 110 Jose 1 tallie.	
b) Planned Equipment:	
b) Planned Equipment:	
b) Planned Equipment:  DER Nameplate Rating: kW	
b) Planned Equipment:  DER Nameplate Rating:kW  DER Type: Inverter based Other	
b) Planned Equipment:  DER Nameplate Rating:kW  DER Type: Inverter based Other  DER Number of Phases: Single Three	
b) Planned Equipment:  DER Nameplate Rating:kW  DER Type: Inverter based Other  DER Number of Phases: Single Three  Service Voltage (120/240 V, 277/480 V, etc.) :V	
b) Planned Equipment:  DER Nameplate Rating:kW  DER Type: Inverter based Other  DER Number of Phases: Single Three  Service Voltage (120/240 V, 277/480 V, etc.):V  Stand-alone Generator (no onsite load)? Yes No	
b) Planned Equipment:  DER Nameplate Rating:kW  DER Type: Inverter based Other  DER Number of Phases: Single Three  Service Voltage (120/240 V, 277/480 V, etc.):V  Stand alone Generator (no onsite load)? Yes No Existing DER? Yes No	
b) Planned Equipment:  DER Nameplate Rating:kW  DER Type: Inverter based Other  DER Number of Phases: Single Three  Service Voltage (120/240 V, 277/480 V, etc.):V  Stand-alone Generator (no onsite load)? Yes No	
b) Planned Equipment:  DER Nameplate Rating:kW  DER Type: Inverter based Other  DER Number of Phases: Single Three  Service Voltage (120/240 V, 277/480 V, etc.):V  Stand alone Generator (no onsite load)? Yes No Existing DER? Yes No	
b) Planned Equipment:  DER Nameplate Rating:kW  DER Type: Inverter based Other  DER Number of Phases: Single Three  Service Voltage (120/240 V, 277/480 V, etc.):V  Stand-alone Generator (no onsite load)? Yes No Existing DER? Yes No	
b) Planned Equipment:  DER Nameplate Rating:	combination
b) Planned Equipment:  DER Nameplate Rating:kW  DER Type: Inverter based Other  DER Number of Phases: Single Three  Service Voltage (120/240 V, 277/480 V, etc.):V  Stand alone Generator (no onsite load)? Yes No Existing DER? Yes No Location of Existing DER (include county):  e) Proposed Point of Common Coupling:  Note: The proposed Point of Common Coupling shall be defined by all or some	combination
b) Planned Equipment:  DER Nameplate Rating:	combination Common
b) Planned Equipment:  DER Nameplate Rating:	combination Common
b) Planned Equipment:  DER Nameplate Rating:	combination Common
b) Planned Equipment:  DER Nameplate Rating:	combination Common
b) Planned Equipment:  DER Nameplate Rating:kW  DER Type: Inverter based Other DER Number of Phases: Single Three Service Voltage (120/240 V, 277/480 V, etc.):V  Stand alone Generator (no onsite load)? Yes No Existing DER? Yes No Location of Existing DER (include county):  e) Proposed Point of Common Coupling:  Note: The proposed Point of Common Coupling shall be defined by all or some of the below information, enough to clearly identify the location of the Point of Coupling. Street Address: City/State/Zip Code:	combination Common
b) Planned Equipment:  DER Nameplate Rating:	combination Common
b) Planned Equipment:  DER Nameplate Rating:	combination Common
b) Planned Equipment:  DER Nameplate Rating:	combination Common

Meter number:	
Utility equipment number (e.g. pole number):	
Other identifying information:	
d) An attached Site Map is required that shows the following:	
*True north	
*Proposed project location, including general area of project	
*Proposed service point location	
•Major roads, streets and/or highways	
3. Requestor Signature:	
I understand that the confidentiality provisions of MN DIP Section 5.9 apply to the contents of	the
Pre-Application Report. The MN DIP Section 5.9, states in part as follows:	
"Each Party shall hold in confidence and shall not disclose Confidential Information, to person (except employees, officers, representatives and agents, who agree to be bound by	
section). Confidential Information shall be clearly marked as such on each page or other	
affirmatively identified Each Party shall employ at least the same standard of care to	
protect Confidential Information obtained from the other Party as it employs to protect i	t <del>s</del>
own Confidential Information Each Party is entitled to equitable relief, by injunction	
otherwise, to enforce its rights under this provision to prevent the release of Confidentia	Ļ
Information without bond or proof of damages, and may seek other remedies available a	t la
or in equity for breach of this provision."	
Lunderstand that 1) the existence of "Available Capacity" in no way implies that an interconnect	
up to this level may be completed without impacts since there are many variables studied as part	<del>01</del>
the interconnection review process, 2) the distribution system is dynamic and subject to change a	<del>nd</del>
3) data provided in the Pre-Application Report may become outdated and not useful at the time of	H-
submission of the complete Interconnection Request.	
Name (type or print):	
Signature:	
Date:	
Pre Application Report requests shall be submitted with attachments to:	
[Fill in method of submittal as specified by Area EPS]	
Fees shall be submitted by:	
[Fill in method of payment as specified by Area EPS]	

Dakota Electric DER Pre-Application Report Form

Longitude:

# Attachment 2: Simplified Application Form MINNESOTA DISTRIBUTED ENERGY RESOURCES

# **Simplified Interconnection Application**

Persons interested in applying for the interconnection of a distributed energy resource (DER) to Dakota Electric's distribution system through the Simplified Process are to fill out this Simplified Interconnection Application. The Simplified Interconnection Application is to be used for inverter-based DER technologies with the capacity of 20 kW AC or less and is to be filled out completely by the Applicant. The Simplified Application shall be returned to Dakota Electric with the requested material information and a non-refundable \$100 application fee.

Proposed DER interconnections to Dakota Electric's distribution submitted under the Simplified Process may be moved into the Fast Track Process if engineering screens are failed during the Simplified Interconnection Application review. Timeline for review of the Simplified Application is as follows:

- Upon receipt of a Simplified Interconnection Application Dakota Electric has 10 business days to review the application for completeness.
- If the application is deemed incomplete, Dakota Electric shall notify the Applicant of what additional information material is required.
- The Applicant has 5 business days to return the missing information material or their application may lose its queue position and be deemed withdrawn.
- Dakota Electric shall have a total of 20 business days to review the Simplified Interconnection Application, not including time waiting for additional information material to deem the application completed.
- Dakota Electric will notify the Application if the proposed DER system is preliminary approved for interconnection or if the proposed DER system will need to be moved in the Fast Track Process.

# **Checklist for Submission Dakota Electric**

The items below shall be included with submittal of the Simplified Application to the Utility. Failure to include all items will deem the Simplified Application incomplete.

	Included
\$100 Non-Refundable Simplified Application Fee	☐ Yes
One-line diagram - Details required on one-line diagram specified at the end of the interconnection application.	☐ Yes
All Certified Equipment Manufacturer Specification Sheets	☐ Yes
Site Layout Drawing	☐ Yes
Copy of Insurance Declaration page or other acceptable proof of insurance	☐ Yes

# Possible Additional Documentation

- If an Application Agent is being used for this project, the Site Layout Drawing must be signed by the Interconnection Customer indicating Site Control of the DER interconnection location.
- If the DER export capacity is limited, include information material explaining the limiting capabilities.
- If Energy Storage is included with the proposed DER system include the Energy Storage Application.

**Simplified Interconnection Application** 

Interconnection Customer	- 11					
Full Name (must match the name of the existing service account):						
Account Number: Meter Number:						
Mailing Address:						
City:		State:	Zip Code:	:		
Email:		Phone:				
Application Agent						
Is the Customer using an Application Agent for this app	lication?	☐ Yes	□ No			
If Interconnection Customer is not using an Ap	plication Agent, p	lease skip to the ne	xt section.			
Application Agent:						
Company Name:						
, ,						
Email:		Phone:				
For Office Use Only	I					
Application ID:	Queue Numbe	er:				
Date Received: Application Fee Received:						
Date Preliminary Approval Provided to Interconnection	Customer:					

Distributed Energy Resource Information									
Loca	tion (if different from mailing address	s of Inte	rconne	ction Custon	ner):				
Will	Will the Proposed DER system be interconnected to an existing electric service? ☐ Yes ☐ N								l No
Is th	e Distributed Energy Resource a single	e gener	ating u	nit or multipl	e?		Single	☐ Mult	iple
DER	Type (Check all that apply):								
	olar Photovoltaic	□ Wi	nd		□E	inergy i	Storage		
□С	ombined Heat and Power	□ Sol	ar Ther	mal		Other (	please s	pecify)	
	DER systems with Energy Storage	must al	so subr	nit the Energ	y Storage Ap	plicatio	on to the	Utility.	
Inve	rter Manufacturer:		Mode	d:					
Phase Configuration of Proposed DER System:					Single	□Th	ree		
Aggr	regate Inverter(s) Nameplate Rating:				kW <sub>ac</sub>			i	kVA <sub>ac</sub>
Is the export capability of the DER limited?					□ Yes	□ No	)		
	If the DER export capacity is limited,	include	inform	ation materi	al explaining	the lin	niting ca	pabilities	
-	regate DER Capacity (the sum of name age devices at the PCC):	eplate ca	apacity	of all genera	tion and				kW <sub>ac</sub>
Insta	alled DER System Cost (before incention	ves):				\$			
Estin	nated Installation Date:								
Equ	uipment Certification								
Is th	e DER equipment certified?				☐ Yes	: Г	□No		
Ple	ease list all certified equipment bel sheets with			-		-	icturer s	specifica	tion
	Equipment Type				Certif	ying Eı	ntity		
1									
2									
3									
4									

Interconnection Agreement		
Propose DER interconnections that are also deemed Qualifying Facilities under N 216B.164 are eligible to sign the Utility's Agreement for Cogeneration and Small Facilities. Included in this agreement are payment terms for excess power general DER system the Utility may purchase. Interconnection Customers may choose to a Distribution Interconnection Agreement.	Powe	er Production by the proposed
The Interconnection Customer request an Interconnection Agreement to also be executed.		Yes □ No
Disclaimers – Must be completed by Interconnection Customer		
		Initials
The Interconnection Customer has opportunities to request a timeline extension during the interconnection process. Failure by the Interconnection Customer to me or request an extension for a timeline outlined in the Interconnection Process could result in a withdrawn queue position and the need to re-apply.  Propose DER interconnection to the Utility's distribution submitted under the Simplified Process may be moved into the Fast Track Process if engineering scree are failed during the Simplified Application review.	d	
Application Signature – Must be completed by Interconnection	Cust	omer
I designate the individual or company listed as my Application Agent to serve as ragent for the purpose of coordinating with Dakota Electric on my behalf throught the interconnection process.  I hereby certify that, to the best of my knowledge, the information provided in this conditions that the Library provided in this conditions are consistent.	out s App	
and that I have appropriate Site Control in conformance with the Interconnection I abide by the Terms and Conditions for Interconnecting an Inverter-Based Distribu No Larger than 20 kW (Simplified Process) and return the Certificate of Completi has been installed.	ted E	Energy Resource
Applicant Signature: Date:		
***Please print clearly or type and return completed along with any additiona	l doc	umentation***

# **Information Required on One-Line Diagram**

An Interconnection Application must include a site electrical one-line diagram showing the configuration of all Distributed Energy Resource equipment, current and potential circuits, and protection and control schemes. The one-line diagram shall include:

- Applicant name.
- Application ID.
- Installer name and contact information.
- Address where DER system will be installed must match application address.
  - O Be sure to list the address for the protective interface equipment if the protective interface equipment is located at a different address than the DER system.
- Correct positions of all equipment, including but not limited to panels, inverter, and DC/AC disconnect. Include distances between equipment, and any labeling found on equipment.

This one-line diagram must be signed and stamped by a licensed Minnesota Professional Engineer if the Distributed Energy Resource is larger than 50 kW (if uncertified) and 250 kW (if certified.)

# Attachment 2: Simplified Application Form (cont'd) Exhibit A – Terms and Conditions for Interconnecting an Inverter-Based DER No Larger than 20 kW

1.0 Construction of the Facility

The Interconnection Customer (the "Customer") may proceed to construct (including operational testing not to exceed two hours) the Distributed Energy Resource(s) when the Area EPS Operator Dakota Electric (the "Company") approves the Interconnection Application (the "Application").

2.0 Interconnection and Operation

The Customer may operate Distributed Energy Resource(s) and interconnect with the Company's electric system once all of the following have occurred:

- 2.1. Upon completing construction, the Customer will cause the Distributed Energy Resource(s) to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction, and
- 2.2. The Customer returns the Certificate of Completion to the Company, and
- 2.3. The Company:
- 2.3.1 Shall have the opportunity to witness test as described in Minnesota Technical Requirements, but takes no liability for the results of the test. Completes its inspection of the Distributed Energy Resource(s) to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes and standards. All inspections must be conducted by the Company, at its own expense, within ten Business Days after receipt of the Certificate of Completion and shall take place at a time agreeable to the Parties. The Company shall provide a written permission to operate authorization that the Distributed Energy Resource(s) has passed inspection or shall notify the Customer of what steps it must take to pass inspection within three (3) Business Days.

or

2.3.2 Does not schedule an inspection of the Distributed Energy Resource(s) within ten business days after receiving the Certificate of Completion, in which case the witness test is deemed waived (unless the Parties agree otherwise).

or

2.3.3 Waives the right to inspect the Distributed Energy Resource(s).

- 2.4. The Company has the right to disconnect the Distributed Energy Resource(s) in the event of: 1) improper installation or failure to return the Certificate of Completion, or 2) does not meet any of the requirements of this Agreement or, 3) if applicable, refusal to sign Uniform Statewide Contract.
- 2.5. Revenue quality metering equipment must be installed and tested in accordance with applicable Minnesota Technical Requirements.
- 2.6. If the Distributed Energy Resource(s) either: 1) does not use default IEEE 1547-2018 functions and settings; or 2) is not yet subject to a developed national standard or national certification, then at the option of the Area EPS Operator the Company there needs to be in place an operating agreement to document and govern the operation of the Distributed Energy Resource(s).

# 3.0 Safe Operations and Maintenance

The Customer shall be fully responsible to operate, maintain, and repair the Distributed Energy Resource(s) as required to ensure that it complies at all times with the interconnection standards to which it has been certified.

### 4.0 Access

The Company shall have access to the disconnect switch, if required by the Companythe Area EPS Operator, and metering equipment of the Distributed Energy Resource(s) at all times as described in Minnesota Technical Requirements. The Company shall provide reasonable notice to the Customer when possible prior to using its right of access.

# 5.0 Disconnection

The Company may temporarily disconnect the Distributed Energy Resource(s) upon the following conditions:

- 5.1. For scheduled outages upon reasonable notice.
- 5.2. For unscheduled outages or emergency conditions.
- 5.3. If the Distributed Energy Resource does not operate in the manner consistent with these Terms and Conditions.
- 5.4. The Company shall inform the Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.
- 5.5. If the Customer is in Default it may be disconnected after a 60-day written notice is provided and the Default is not cured during this 60-day notice. This provision does not apply to disconnection based on outages or emergency conditions.

- 6.0 Treatment Similar to Other Retail Customers
  - 6.1. The Customer may be disconnected consistent with the rules and practices for disconnecting other retail electrical customers

# 7.0 Indemnification

- 7.1. This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement.
- 7.2. The Parties shall at all times indemnify, defend, and save the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or inactions of its obligations under this agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.
- 7.3. This indemnification obligation shall apply notwithstanding any negligent or intentional acts, errors or omissions of the indemnified Party, but the indemnifying Party's liability to indemnify the indemnified Party shall be reduced in proportion to the percentage by which the indemnified Party's negligent or intentional acts, errors or omissions caused the damages.
- 7.4. Neither Party shall be indemnified for its damages resulting from its sole negligence, intentional acts or willful misconduct. These indemnity provisions shall not be construed to relieve any insurer of its obligation to pay claims consistent with the provisions of a valid insurance policy.
- 7.5. If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
- 7.6. If an indemnifying party is obligated to indemnify and hold any indemnified person harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.
- 8.0 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification

shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party. Insurance

The Parties agree to follow all applicable insurance requirements imposed by Minnesota. All insurance policies must be maintained with insurers authorized to do business in Minnesota. See <a href="MN DIP-DEA">MN DIP-DEA</a> Section 5.10.

# 9.0 Limitation of Liability

Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever, except as allowed under paragraph 6.0.

# 10.0 Termination

The agreement to operate in parallel may be terminated under the following conditions:

# 10.1. By the Customer

By providing written notice to the Company.

# 10.2. By the Company

If the Distributed Energy Resource(s) fails to operate for any consecutive 12 month period or the Customer fails to remedy a violation of these Terms and Conditions.

### 10.3. Permanent Disconnection

In the event this Agreement is terminated, the Company shall have the right to disconnect its facilities or direct the Customer to disconnect its Distributed Energy Resource.

# 10.4. Survival Rights

This Agreement shall continue in effect after termination to the extent necessary to allow or require either Party to fulfill rights or obligations that arose under the Agreement.

# 11.0 Assignment/Transfer of Ownership of the Facility

This Agreement shall survive the transfer of ownership of the Distributed Energy Resource(s) to a new owner when the new owner agrees in writing to comply with the terms of this Agreement and so notifies the Company.

# Exhibit B - For Energy Storage

energy storage component.

Energy Storage						
Application for:	□ St	tand-alone storage as I	DER □ Storage	as component of DE	ER.	
Customer Account N	umber:					
Address of Generatin	ig Facility:					
City:		State:		Zip Code:		
City.		State.		Zip Code.		
Equipment Manufact	urer:		Equipment Model	<u>:</u>		
Max Continuous Rea	l Power (In k'	W):	Max Continuous A	Apparent Power (In l	kVA):	
Power Factor range of adjustability: Peak AC Energ		Peak AC Energy (	In kW):			
	15741 11 . 10 1					
required to be attach		Manufacturer specifica lication.	ation sheet(s) are	☐ Yes	□ No	
Is the storage 100% of source?	charged by a n	net energy metering el	igible energy	☐ Yes	□ No	
Source charging the	storage (Check	k all that apply):				
☐ Utility		] Wind	□ Sola	r		
□ Diesel		☐ Other (please special	fv)			
L Dieser		Other (please speen				
Is the storage configu	ired to export	energy to the Area EF	PS?	☐ Yes	□ No	
Are the settings acces	ssible to the en	nd user?		☐ Yes	□ No	
For Office Use Only						
Application ID:			Queue Number:			
Date Received:						

Energy Storage	
Available control operating modes:	
Control modes being enabled for interconnection:	
Control modes coming emotes for microsmotion.	
For non-export, how does the system determine the magnitude of customer load?	
What is the process for changing operational modes of the energy storage?	

 $Please\ attach\ any\ additional\ materials.$ Dakota Electric <u>DER</u> Energy Storage Application - 3 -

Application for: Stand-alone storage as the DER
Storage as a component of a DER
This form is required in addition to a completed Minnesota DER Interconnection Process (MN DIP) Application form for any DER with an energy storage component. Additional information in the application may be required. See Minnesota Technical Requirements.
(An application to interconnect is required only for storage designed to operate in parallel with the grid. Backup generators and electric vehicles that do not parallel need not apply.)
Customer Account Number:
Address of Generating Facility:
City: State: MN Zip:
Equipment Manufacturer:
Equipment Model:
Real Power, max continuous (kW):
Apparent Power, max continuous (kVA):
Power factor range of adjustability:
Real Power, peak AC Energy (kWh):
Available control operating modes:
Control modes being enabled for interconnection:
Is equipment UL 1741 Listed? Yes No
Manufacturer specification sheet(s) are required to be additionally attached.
Is the storage 100% charged by a net energy metering eligible energy source?  Yes No
Source charging the storage (check all that apply):UtilitySolarWindDieselOther:
Is the storage configured to export energy to the Area EPS? Yes No  Are the settings accessible to the end user? Yes No
For non-export, how does the system determine the magnitude of customer load?
What is the process for changing operational modes of the energy storage?

# **Exhibit C – Certificate of Completion**

Certification of Completion

The Interconnection Customer should complete the Distributed Energy Resource Certification of Completion for a proposed DER interconnection in the Simplified Process Track. As a condition of interconnection, a completed copy of this form must be returned to the Utility.

<b>Distributed Energy Resource Information</b>					
Interconnection Customer:					
DER Project Address:					
City:	City:				
Application ID:	pplication ID: Meter Number:				
Is the DER system owner-installed?	□ Yes	□ No (If no please Inf	completed Information)	staller	
Installer Information					
Contact Name:					
Name of Business:					
Email: Phone:					
Electrician Name		License #			
Electrical Permitting Authority			<u> </u>		
The DER has been installed and inspected in compliance verified by the information provided below. (Please attac		1	•		
Inspector Name:		Date of Inspection:			
Electrical Inspection Permit Number:	Authority Havi	ng Jurisdiction (city/	county):		
***Please print clearly or type and return comple	ted along with	any additional docu	mentation**	**	
Ean Office Use Only					
For Office Use Only Date Received:					

# **Distributed Energy Resource Certificate of Completion**

# **MN DIP Simplified Process Interconnection**

customer.	
Account Number:	Meter Number:
Application ID number:	=
Address of Distributed Energy Resource (DER):	
City:	State: MN Zip:
Is the DER owner installed? Yes No If no: Install	
Company:	
Contact:	
Phone:Email: _	
Electrician Name / License#:	
The DER has been installed and inspected in comp	liance with the local electrical permitting
authority as verified by the signature below or the	additionally attached document.
Inspector Signature:	
Print Name:	Date:
Authority Having Jurisdiction (city/county):	
As a condition of interconnection, email a complete	ed copy of this form to
at	<del></del>
Electronic submission of this form through an Area	1 EPS Operator's online portal [if one exists] shal
be an alternative means to satisfy the Certificate of	Completion submission requirements.
If you prefer to mail the form, please mail to:	

# **Attachment 3: Interconnection Application Form**

# **Interconnection Application**

Persons interested in applying for the interconnection of a distributed energy resource to Dakota Electric's distribution system through the Fast Track or Study Processes are to fill out this Interconnection Application. The Interconnection Application is to be filled out completely by the applicant or as noted in each section of the application. Dakota Electric will contact the applicant within 10 business days once the Interconnection Application and the corresponding processing fee is submitted to Dakota Electric. Dakota Electric will then notify the applicant of the completeness of their application. If the application is deemed incomplete by Dakota Electric, they will provide the applicant with a list of missing material. The applicant will then have 10 business days to provide Dakota Electric with this information or request an extension, otherwise the application will be deemed incomplete and the applicant will lose their place in the queue. Sections that are noted with \* are required to be filled out.

# **Checklist for Submission to Utility**

The items below shall be included with submittal of the Interconnection Application to Dakota Electric. Failure to include all items will deem the Interconnection Application incomplete.

	Included
Non-Refundable Processing Fee	
Fast Track	
<ul> <li>\$100 + \$1/kW for Certified Systems</li> </ul>	☐ Yes
<ul> <li>\$100 + \$2/kW for Non-Certified Systems</li> </ul>	□ Yes
Study Process	
<ul> <li>\$1,000 + \$2/kW down payment. Additional study fees may apply.</li> </ul>	
One-line diagram	
<ul> <li>This one-line diagram must be signed and stamped by a Professional Engineer licensed in Minnesota if the DER is uncertified greater than 50 kW AC or if certified system is over 250 kW.</li> </ul>	☐ Yes
<ul> <li>Details required on one-line diagram specified at the end of the interconnection application.</li> </ul>	
Schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits	☐ Yes
Inverter Specification Sheet(s) (if applicable)	☐ Yes
Documentation that describes and details the operation of protection and control schemes	☐ Yes
Documentation showing site control	☐ Yes

# Possible Additional Documentation

- If the DER export capacity is limited, include information material explaining the limiting capabilities.
- If Energy Storage is included with the proposed DER system include the Energy Storage Application.

General *					
Select Review Proce	ss:	ocess $\square$	l Study Process		
Application is for:	☐ New Distribution Energy Resource		lition or Material Mod stributed Energy Reso		
If Capacity Addition or Material Modification to existing facility, please describe:					
Distributed Energy R	Resource will be used for what re	ason? (Check all tha	at apply):		
Districtive Energy 1		usoni (Cheen un un	upp.j/).		
☐ Net Metering	☐ Supply Pov	ver to Interconnection	on Customer		
☐ Supply Power to A	Area EPS				
Installed DER System	Cost (before incentives):	\$			
Interconnection Co	ustomer *				
Full Name (must ma	tch the name of the existing sen	vice account):			
Account Number:		Meter Number	:		
Mailing Address:					
			T		
City:			State:	Zip Code:	
Email:			Phone:		

 $<sup>* \</sup> Indicates \ section \ must \ be \ completed.$ 

Application Agent *								
Is the Customer using an Application Agent for this application?					☐ Yes ☐ No			
If Interconnec	If Interconnection Customer is not using an Application Agent, please skip to the next section.							
Application Agent:								
Company Name:								
Email:				Phone:				
Distributed Energy R	lesource In	formation *						
Estimated Installation	Date:							
Location (if different fr	om mailing	address of Interconne	ction Customer):	:				
Will the Proposed DER	system be i	nterconnected to an e	existing electric so	ervice?		□Y€	es E	] No
Is the Distributed Energ	gy Resource	a single generating u	nit or multiple?			Single	☐ Mult	iple
DER Type (Check all t	that apply):							
☐ Solar Photovoltaic		□ Wind			Energy S	Storage		
☐ Combined Heat and	Power	☐ Solar Ther	mal		Other (	please s <sub>l</sub>	pecify)	
DER systems w Total Number of Distri		Storage must also subreve Resources to be inte		orage Ap	plicatio	on to the	Utility.	
pursuant to this Interco		,,,						
Phase configuration of Distributed Energy Resource(s): ☐ Single Phase ☐ Three Phase					nase			
Type of Generator:	☐ Inverter	Syn □ Syn	chronous		□ Indu	action		
Aggregate DER Capacit	Aggregate DER Capacity (the sum of nameplate capacity of all generation and storage devices at the PCC):							
		$kW_{ac}$					,	VAR <sub>ac</sub>

<sup>\*</sup> Indicates section must be completed.

Export Capacity Limitation *						
Is the export capability of the DER limited?						
If the DER export capacity is limited, complete the following sections and include information materi explaining the limiting capabilities.						
Maximum Physical Export Capacity Requested:						
If Yes, please provide additional details describing met	hod of export limitation:					
T 17 6						
Load Information *						
Interconnection Customer's or Customer-sited Load:			$kW_{ac}$			
Typical Reactive Load (if known):						
Equipment Certification*						
Is the DER equipment certified?	□ Ye	s 🗆 No				
Please list all certified equipment below. Include all certified equipment manufacturer specification sheets we the Interconnection Application submission.						
Equipment Type	Certi	fying Entity				
1						
2						
3						
4						

<sup>\*</sup> Indicates section must be completed.

Prime Mover *							
Please indicate the prime	mover:						
☐ Solar Photovoltaic	☐ Micro	oturbine		☐ Fuel Cell			
☐ Reciprocating Engine	☐ Gas T	Curbine		☐ Other (	please	specify)	
Is the prime mover compa	atible with certified pr	rotection	equipment pa	ckage?		☐ Yes	□ No
DER Manufacturer:	Mode	l Name &	k Number:		Versi	on:	
List of Adjustable Set Po	ints for Protection Eq	uipment o	or Software:				
Summer Name Plate Rating: $kW_{ac}$ Summer Name Plate Rating: $kW_{ac}$					$kW_{ac}$		
Winter Name Plate Rating: $kVA_{ac}$ Winter Name Plate Rating:			kVA <sub>ac</sub>				
Rated Power Factor:	Rated Power Factor: Leading: Lagging:						
A completed Power S	ystem Load Flow date	a sheet m	ust be supplie	d with the In	terconi	nection Appli	ication.
Only appropriate	sections beyond this p	oint unti	l the signature	page are to	be con	ıpleted.	
Distributed Energy Res	source Characteristi	ic Data (	for Inverter-	based mach	nines)		
Max design fault contribu	ution current:						
Is your response to the previous field an Instantaneous or RMS Instantaneous			□ RMS				
Harmonic Characteristics	:						
Start-up Requirements:							

 $<sup>* \</sup> Indicates \ section \ must \ be \ completed.$ 

Distributed Energy Resource Characteristic Data (for Synchronous machines)				
RPM Frequency:	Neutral Grounding Resistor:			
Direct Axis Synchronous Reactance, $X_d$ :	Zero Sequence Reactance, $X_0$ :			
Direct Axis Transient Reactance, $X'_d$ :	KVA Base:			
Direct Axis Subtransient Reactance, $X_d^{\prime\prime}$ :	Field Volts:			
Negative Sequence Reactance, X <sub>2</sub> :	Field Amperes:			

Please provide the appropriate IEEE model block diagram of excitation system, governing system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be submitted.

Distributed Energy Resource Characteristic Data (for Induction machines)				
RPM Frequency:	Neutral Grounding Resistor:			
Motoring Power (kW):	Exciting Current:			
Heating Time Constant:	Temperature Rise:			
Rotor Resistance, $R_r$ :	Frame Size:			
Stator Resistance, $R_s$ :	Design Letter:			
Stator Reactance, $X_s$ :	Reactive Power Required In Vars (No Load):			
Rotor Reactance, $X_r$ :	Reactive Power Required In Vars (Full Load):			
Magnetizing Reactance, $X_m$ :	Total Rotating Inertia, H:			
Short Circuit Reactance, $X_d''$ :				

Interconnection Facilities Information								
Will a transformer be used between the DER and the Point of Common ☐ Yes ☐ No Coupling?								
Will the transformer be provided by the Interconnection Customer? If yes, please fill in the fields below.								
Proposed location of protective interface equipment on property:								
Transformer Data (For Inte	rconnection	on Customer-Owne	d Trans	sformer)				
What is the phase configura	ation of th	e transformer?			☐ Sing	gle Phase	☐ Three P	hase
Size (kVA):		Transformer Impe	edance	(%):	On kV	A Base:		
Transformer Volts: (Primary)	Delta:		Wye:		1	Wye Gro	unded:	
Transformer Volts: (Secondary)	Delta:		Wye:			Wye Grounded:		
Transformer Volts: (Tertiary)	ansformer Volts: Delta: Wye:					Wye Gro	unded:	
Transformer Fuse Data (Fo	r Intercon	nection Customer-C	Owned	Fuse)				
Manufacturer:	Manufacturer: Type: Size:				Speed:			
Interconnecting Circuit Bre	aker (For	Interconnection Cu	stomer	-Owned Circ	cuit Break	er)		
Manufacturer:			Type	:				
Load Rating (in Amps):		Interrupting Ratin	g (In A	Amps):	Trip Spe	ed (Cycles	s):	
Interconnection Protective	Relays (F	or Microprocessor	Control	lled Relays)				
Setpo	oint Funct	ion		Mini	mum		Maximum	

Interconnection Protective Relays (For Relays with Discrete Components)							
Manufacturer:	Type:	Type:			Proposed Setting:		
Manufacturer:	Type:	Type:			Proposed Setting:		
Manufacturer:	Type:		Style/Catalog No.:		Proposed Setting:		
Manufacturer:	Type:		Style/Catalog No.:		Proposed Setting:		
Manufacturer:	Type:		Style/Catalog No.:		Proposed Setting:		
Current Transformer Data:							
Manufacturer:	Type:	Accuracy Class:		Proposed Ratio Connection:			
Manufacturer:	Type:	Accuracy Class:		Proposed Ratio Connection:			
Potential Transformer D	ata:						
Manufacturer:	Type:	pe: Accura		Propose	ed Ratio Connection:		
Manufacturer:	Type:	Accur	acy Class:	Propose	ed Ratio Connection:		

For Office Use Only				
Application ID:				
Date Received:	Application Fee Received:	☐ Yes	□ No	
Date Completed:				

Interconnection Agreement			
Propose DER interconnections that are also deemed Qualifying Facilities less than 40 kW Statute 216B.164 are eligible to sign the Uniform Statewide Contract Agreement for Coge Power Production Facilities. Included in this agreement are payment terms for excess poproposed DER system Dakota Electric may purchase. The Interconnection Customer may the Dakota Electric's Distribution Interconnection Agreement (MN DIA-DEA)	enerat wer g	ion and enerated	Small d by the
For Qualifying Facilities rated less than 40kW: The Interconnection Customer requests an Interconnection Agreement to also be executed.		l Yes	□ No
Disclaimers – Must be completed by Interconnection Customer			
		In	itials
The Interconnection Customer has opportunities to request a timeline extension during the interconnection process (See MN DIP-DEA-DEA Section 1.8.2 and 5.2.3). Failure by the Interconnection Customer to meet or request an extension for a timeline outlined in the Interconnection Process could result in a withdrawn queue position and the need to re-app Propose DER interconnection to the Utility's distribution submitted under the Fast Track Process may be moved into the Study Process if engineering screens are failed during the Interconnection Application review.			IIIdis
Application Signature – Must be completed by Interconnection Customer			
I designate the individual or company listed as my Application Agent to serve as my agent for the purpose of coordinating with Dakota Electric on my behalf throughout the interconnection process.	it	In	itials
I hereby certify that, to the best of my knowledge, the information provided in this Applic have appropriate Site Control in conformance with the Interconnection Process. I agree to and Conditions of the Interconnection Process and will return the Certificate of Completic been installed.	abide	by the	Terms
Applicant Signature: Date:	-	<del></del>	
***Please print clearly or type and return completed along with any additional do	ocum	entation	***

# **Information Required on One-Line Diagram**

An Interconnection Application must include a site electrical one-line diagram showing the configuration of all Distributed Energy Resource equipment, current and potential circuits, and protection and control schemes. The one-line diagram shall include:

- Applicant name.
- Application ID.
- Installer name and contact information.
- Address where DER system will be installed must match application address.
  - Be sure to list the address for the protective interface equipment if the protective interface equipment is located at a different address than the DER system.
- Correct positions of all equipment, including but not limited to panels, inverter, and DC/AC disconnect. Include distances between equipment, and any labeling found on equipment.

This one-line diagram must be signed and stamped by a licensed Minnesota Professional Engineer if the Distributed Energy Resource is larger than 50 kW (if uncertified) and 250 kW (if certified.)

# **INTERCONNECTION APPLICATION (Form Template)**

This form is for Distributed Energy Resources (DERs) that meets the eligibility of the Minnesota Interconnection Process (see Section 1.1) and are not eligible for consideration under the Section 2 Simplified Process.

This Application is considered complete when it provides all applicable and correct information required below. Additional technical data may be necessary prior to the system impact study process as described in 4.3.3, if applicable, but is not relevant to application completeness. The following additional information must be submitted with an application:

O Single Line Diagram O Proof of Site Control (see Section 1.7) O Specification Sheet(s) and Site Diagram
A DER with an energy storage component must additionally complete Exhibit B For Energy Storage
Application is for:
New DER(s)  Capacity addition or Material Modification to Existing DE (see MN DIP Glossary of Terms )
Select Review Process:

Dakota Electric **DER** Interconnection Application

O Fast Track Process	O Study Process
Confirm eligibility requirements at MN-DIP Section 3.1	Confirm eligibility requirements at MN DIP Section 4.
[For Certified Equipment, the processing fee shall be up to \$100 + \$1/kW. For non certified DER, the processing fee shall be up to \$100 + \$2/kW.]	exceed \$1,000 plus \$2.00 per kW towards the cost
Additional fees or deposits shall not be required	l, except as otherwise specified in the MN DIP.
Interconnection Customer/Owner	
Name:	
Account Number:	Meter Number:
Mailing Address:	
Telephone:	Email:
[If different,] Application Agent/Company:	
<del>Telephone:</del>	Email:
If capacity addition or Material Modification to	existing facility, please describe:
-Will the DER be used for any of the following:	2
Net Metering? Yes No	
To Supply Power to the Interconnection	Customer? YesNo
To Supply Power to Area EPS? Yes	No
Requested Point of Common Coupling (at a min section and 2) GPS coordinates or an annotated	
Installed DER System Cost (before incentives):	
Interconnection Customer's Requested In Servi	<del>ce Date:</del>
<u>Distributed Energy Resource Information</u>	
Dakota Electric DER Interconnection Applicati	on 12 -

Data applies only to the Distributed Energy Reso	ource not the Interconnection Facilities.
Energy Source:	
Solar Wind Storage	Hydro Type (e.g. Run-of-River):
Diesel Natural Fuel Oil	Other (state type, e.g. solar + wind +
Gas	storage):
Prime Mover:	_
_ = = = = = = = = = = = = = = = = = = =	exiprocating Engine Fuel Cell
Gas Turbine Steam Turbine W	ind Turbine Other (state type):
Type of Generator:	ous Induction
DER Nameplate Rating (in kWac):	DER Nameplate kVAR:
Interconnection Customer or	Typical Reactive Load
Customer Sited Load (in kW, if	<del>(if known):</del>
none, so state):	
Maximum Physical Export Capability Requested (in kW):	
Export Capability Limited (e.g., through use of a device settings of adjustments):	
If yes, describe:	
List components of the Distributed Energy Resor	urce Certified Equipment:
Equipment Type	Certifying Entity
1	
3.	
4.	
5	
J	
Is the prime mover compatible with the certified	protective relay package?
	protective relay package? Yes No
Is the prime mover compatible with the certified  Distributed Energy Resource  Manufacturer, Model Name & Number:	protective relay package? Yes No
Distributed Energy Resource	protective relay package? Yes No

Version Number:			
Nameplate Rating in kW:	(Summer):	<del>(Winter):</del>	
Nameplate Rating in kVA:	<del>(Summer):</del>	<del>(Winter):</del>	
Individual Generator Pov	<del>ver Factor</del>		
Rated Power Factor:	Leading:	Lagging:	
Total Number of Distribu	ited Energy Resour	rces to be interconnected pursuant to	<del>o this</del>
Interconnection Applicat	ion:	Single Phas	e Three Phase
Application.	od): ints for the software: systems load flow date rgy Resource Char	ta sheet must be supplied with the Inter acteristic Data (for inverter based n Instantaneous or RMS?	
		haracteristic Data (for rotating macl	<del>nines)</del>
RPM frequency:		utral Grounding stor (if applicable):	
Synchronous Generators: Direct Axis Synchronou Reactance, X <sub>d</sub> .  Dakota Electric DER Into	<del>1S</del>	Zero Sequence Reactance, X <sub>0:</sub>	

Direct Axis Transient	KVA Base:				
Reactance, X'd:					
Direct Axis Subtransient	Field Volts:				
Reactance, X"d:					
Negative Sequence Reactance,	Field Amperes:				
<del>X</del> 2:					
Induction Generators:					
Motoring Power (kW):	Exciting Current:				
122t or K (Heating	Temperature Rise:				
Time Constant):					
Rotor Resistance, Rr:	Frame Size:				
Stator Resistance, Rs:	<del>Design Letter:</del>				
Stator Reactance, Xs:	Reactive Power Required In				
	<del>Vars (No Load):</del>				
Rotor Reactance, Xr	Reactive Power Required In				
	<del>Vars (Full Load):</del>				
Magnetizing	Total Rotating Inertia, H:				
Reactance, Xm:	Per Uni	it on kVA			
	Base				
gr gr t	2430				
Short Circuit					
Reactance, Xd'':	and Delega Planeta a trade a lactición de				
	erator <u>Dakota Electric</u> prior to submitting the	د.			
interconnection Application to determi	ne if the specified information above is require	<del>xa.</del>			
Excitation and Governor System Data:	for Synchronous Generators Only				
Provide appropriate IEEE model block diagram of excitation system, governor system and power					
system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be					
determined to be required by applicable studies. A copy of the manufacturer's block diagram					
may not be substituted.					
Interconnection Facilities Information	an .				
The Connection Facilities Information	<del>111</del>				
Will a transformer be used between the DER and the Point of Common Coupling?					
Will the transformer be provided by the Interconnection Customer?					
Transformer Data (If Applicable, for Interconnection Customer Owned Transformer):					
·					
Is the transformer: Single Phase	Three Phase				
Dakota Electric <u>DER</u> Interconnection A	Application				
Zanom Licente Din interconnection i	-FF				

\_\_\_\_\_\_ 15 -

		<del>Impedance (%)</del>	<del>):</del>	
If Three Phase	÷			
<b>Transformer</b>	<del>Volts:</del>	<del>Delta:</del>	<del>Wye:</del>	<del>Wye</del>
Primary:				Grounded:
<b>Transformer</b>	Volts:	<del>Delta:</del>	<del>Wye:</del>	<del>Wye</del>
Secondary:				Grounded:
<b>Transformer</b>	Volts:	<del>Delta:</del>	<del>Wye:</del>	<del>Wye</del>
Tertiary:				Grounded:
			erconnection Customer	
(Attach copy o	of fuse manufa	cturer's Minimun	<del>n Melt and Total Cleari</del>	ng Time-Current Curves)
Manufacture	<del>:</del>	<del>Type:</del>	<del>Size:</del>	<del>Speed:</del>
Interconnectin	g Circuit Bree	<del>sker (if applicable</del> )	<del>):</del>	
Manufacture	<del>:</del>		<del>Type:</del>	
Load Rating		Interrupting R	ating Trin	<del>Speed</del>
(Amps)		(Amps):	(Cyc)	•
Interconnection  If Microproces		<del>lelays (If Applical</del> <del>d:</del>	<del>ble):</del>	
List of Function	ons and Adjust	table Setpoints for	the protective equipme	ent or software:
		nt Function	Minimum	Maximum
	1.		= ===	
	2.			<del></del>
	6.			
If Discrete Co	mponents:			
		sed Time-Overcu	rrent Coordination Cur	<del>ves)</del>
Manufacturer:			Style/Catalog No.:	Proposed Setting:
Manufacturer:		<del>Type:</del>	Style/Catalog No.:	Proposed Setting:
<b>Manufacturer</b> :		<del>Type:</del>	Style/Catalog No.: Style/Catalog No.:	Proposed Setting:
Manufacturer:		<del>Type:</del>	Style/Catalog No.:	Proposed Setting:
Manufacturer:		<del></del> <del>Type:</del>	-Style/Catalog No.:	Proposed Setting:
		onnection Applica		
			- 16 -	

**Transformer** 

on kVA Base:

Size (kVA):

# **Current Transformer Data (If Applicable):**

(Enclose Copy of Manufacturer's Excitation and Ratio Correction Curves)

Manufacturer:

Accuracy Proposed Type:

Class: Ratio

Connection:

Manufacturer:

Accuracy **Proposed** Type: Class:

Ratio

Connection:

# Potential Transformer Data (If Applicable):

Manufacturer:

Accuracy Proposed Type: Ratio Class:

Connection:

Manufacturer:

Accuracy **Proposed** Type:

> Ratio Class:

Connection:

# **General Information**

Enclose copy of site electrical one-line diagram showing the configuration of all DER equipment, current and potential circuits, and protection and control schemes. The one-line diagram shall include:

- Interconnection Customer name.
- Application ID (or, if applicable, Customer account number)
- Installer name and contact information.
- Install address- must match application address.
- Correct positions of all equipment, including but not limited to panels, inverter, and DC/AC disconnect. Include distances between equipment, and any labeling found on equipment. See Minnesota Technical Requirements.

This one-line diagram must be signed and stamped by a Professional Engineer licensed in Minnesota if the DER is larger than 50 kW (if uncertified) and 250 kW (if certified.)
Is One Line Diagram Enclosed?
Enclose copy of any site documentation that indicates the precise physical location of the proposed Distributed Energy Resource (e.g., USGS topographic map or other diagram or documentation). Is Available Documentation Enclosed?
Proposed location of protective interface equipment on property (include address if different from the Interconnection Customer's address)
Enclose copy of any site documentation that describes and details the operation of the protection and control schemes. Is Available Documentation Enclosed?
Enclose copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable).  Are Schematic Drawings Enclosed?  No
Enclose copies of documentation showing site control (MN DIP Section 1.7)  Is Available Documentation Enclosed?  Yes No
<u>Disclaimer:</u> The Area EPS Operator <u>Dakota Electric</u> shall notify the Interconnection Customer with an opportunity to request a timeline extension (See MN DIP Section 1.8.2 and 5.2.3.). Failure by the Interconnection Customer to meet and request an extension as described in MN DIP Section 5.2.3 for a timeline outlined in the MN DIP could result in a withdrawn queue position and the need to re-apply. INITIAL:
Interconnection Customer Signature
I hereby certify that, to the best of my knowledge, all the information provided in this Interconnection Application is true and correct.
Interconnection Customer: Date:

### **Attachment 4: Certification Codes and Standards**

Prior to Commission approval of the update of Minnesota Technical Requirements (anticipated in LateFebruary 2019), the existing Minnesota Technical Requirements and the following standards shall be used in conjunction with the Minnesota Interconnection Process (MN DIPMN DIPDEA) and Minnesota Interconnection Agreement (MN DIAMN DIA-DEA) for Distributed Energy Resources. 

14 Once approved, the Minnesota DER Technical Interconnection and Interoperability Requirements will supersede this attachment.

When the stated version of the following standards is superseded by an approved revision then that revision shall apply.

IEEE 1547-2003 IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems

IEEE 1547a-2014 IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems – Amendment 1  $\,$ 

IEEE 1547.1-2005 IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems

IEEE 1547.1a-2015 (Amendment to IEEE Std 1547.1 – 2005) IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems – Amendment 1

UL 1741 Inverters, Converters, Controllers, and Interconnection System Equipment for Use in Distributed Energy Resources (2010)

NFPA 70 (2017), National Electrical Code

IEEE Std C37.90.1(2012) (Revision of IEEE Std C37.90.1-2002), IEEE Standard for Surge Withstand Capability (SWC) Tests for Protective Relays and Relay Systems Associated with Electric Power Apparatus

IEEE Std C37.90.2 (2004) (Revision of IEEE Std C37.90.2-1995), IEEE Standard for Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers

<sup>&</sup>lt;sup>14</sup> This is an interim document while the Commission updates the Minnesota Distributed Energy Resource Interconnection and Interoperability Technical Requirements which includes alignment with the anticipated final IEEE 1547-2018 revision. For the transition period between Minnesota's existing statewide interconnection standards and the updated standards, both inverters certified to existing 1547.1 and 1547.1a-2015 (most current version); as well as, certified inverters per the expected revised 1547.1 standard should be acceptable.

IEEE Std C37.108-20021989 (Revision of C37.108-19892002), IEEE Guide for the Protection of Network Transformers

IEEE Std C57.12.44-2014 (Revision of IEEE Std C57.12.44-2005), IEEE Standard Requirements for Secondary Network Protectors

IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in Low-Voltage (1000V and Less) AC Power Circuits

IEEE Std C62.41.2-2002\_Cor 1-2012 (Corrigendum to IEEE Std C62.41.2-2002) - IEEE Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and Less) AC Power Circuits Corrigendum 1: Deletion of Table A.2 and Associated Text

IEEE Std C62.45-2002 (Revision of IEEE Std C62.45-1992) - IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000 V and less) AC Power Circuits

ANSI C84.1-(2016) Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)

IEEE Standards Dictionary Online, [Online]

NEMA MG 1-2016, Motors and Generators

IEEE Std 519-2014, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems

# **Attachment 5: Certification of Distributed Energy Resource Equipment**

Distributed Energy Resource (DER) equipment proposed for use in an interconnection system shall be considered certified for interconnected operation if: 1) it has been tested in accordance with industry standards for continuous utility interactive operation in compliance with the appropriate codes and standards referenced below by any Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration to test and certify interconnection equipment pursuant to the relevant codes and standards listed in MNDIPMN DIP-DEA

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- 4.02.0 Attachment 4Attachment 4, 2) it has been labeled and is publicly listed by such NRTL at the time of the interconnection application, and 3) such NRTL makes readily available for verification all test standards and procedures it utilized in performing such equipment certification, and, with consumer approval, the test data itself. The NRTL may make such information available on its website and by encouraging such information to be included in the manufacturer's literature accompanying the equipment.
- 2.03.0 The Interconnection Customer must verify that the assembly and use of the equipment falls within the use or uses for which the equipment was tested, labeled, and listed by the NRTL.
- 3.04.0 Certified equipment shall not require further type-test review, testing, or additional equipment to meet the requirements of this interconnection procedure; however, nothing herein shall preclude the need for a DER Design Evaluation or an on-site commissioning test by the parties to the interconnection as provided for in the Minnesota Technical Requirements.
- 4.05.0 If the certified equipment package includes only interface components (switchgear, inverters, or other interface devices), then an Interconnection Customer must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and is consistent with the testing and listing specified for this type of interconnection equipment.
- 5.06.0 Provided the generator or electric source, when combined with the equipment package, is within the range of capabilities for which it was tested by the NRTL, and does not violate the interface components' labeling and listing performed by the NRTL, no further typetest review, testing or additional equipment on the customer side of the Point of Common Coupling shall be required to be considered certified for the purposes of this interconnection procedure; however, nothing herein shall preclude the need for a DER Design Evaluation or an on-site commissioning test by the parties to the interconnection as provided for in the Minnesota Technical Requirements.
- 6.07.0 An equipment package does not include equipment provided by the Area EPS.

# **Attachment 6: System Impact Study Agreement**

	AGREEMENT is made and entered into thisday of
20	_ by and between
a	organized and existing under the laws of the State of
	, ("Interconnection Customer"), and
	, Dakota Electric Association, a
("Are	<u>Cooperative Corporation</u> existing under the laws of the State of Minnesota a EPS Operator or <u>Dakota Electric</u> "). Interconnection Customer and Area EPS Operator may be referred to as a "Party," or collectively as the "Parties."
cucii	RECITALS
Resou Interc	EREAS, the Interconnection Customer is proposing to develop a Distributed Energy arce (DER) or generating capacity addition to an existing DER consistent with the connection Application completed by the Interconnection Customer ; and
	<b>EREAS</b> , the Interconnection Customer desires to interconnect the DER with the Area EPS ator Dakota Electric's electric system; and
to per	EREAS, the Interconnection Customer has requested the Area EPS Operator Dakota Electror a system impact study(s) to assess the impact of interconnecting the DER with the EPS Operator Dakota Electric's electric System, and potential Affected System(s);
	V, THEREFORE, in consideration of and subject to the mutual covenants contained herein arties agreed as follows:
1.0	When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard Minnesota Distributed Energy Resources Interconnection Procedures (MN DIPMN DIPDEA.)
2.0	The Interconnection Customer elects and the Area EPS Operator Dakota Electric shall cause to be performed a distribution system impact study(s) consistent with the MN DIPMN DIP-DEA. The scope of a distribution system impact study shall be subject to the assumptions set forth in this Agreement; including Attachment A.
3.0	A system impact study will be based upon the technical information provided by Interconnection Customer in the Interconnection Application. The Area EPS Operator Dakota Electric 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.
- 4.0 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 known construction and modifications to the Dakota Electric systemfacilities that are required as a result of the Interconnection Application and non-binding good faith estimates of cost responsibility and time to construct.
- 5.0 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.
- 6.0 Affected Systems may participate in the preparation of a system impact study, with a division of costs among such entities as they may agree. All Affected Systems shall be afforded an opportunity to review and comment upon a system impact study that covers potential adverse system impacts on their electric systems.
- 7.0 If the Area EPS Operator Dakota Electric 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 paragraph 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 Dakota Electric'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 Dakota Electric's electric system.
- 8.0 A deposit of the equivalent of the good faith estimated cost of a distribution system impact study and the good faith estimated cost of a transmission system impact study

MN DIPMN DIP-DEA System Impact Study Agreement

- 2. -

shall be required from the Interconnection Customer when the signed Agreement is provided to the Area EPS Operator Dakota Electric.

- 9.0 Any study fees shall be based on the Area EPS Operator Dakota Electric's actual costs and will be invoiced to the Interconnection Customer within 20 Business Days after the study is completed and delivered and will include a summary of professional time.
- 10.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 20 Business Days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, the Area EPS Operator Dakota Electric shall refund such excess within 20 Business Days of the invoice without interest.
- 11.0 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.

#### 12.0 Amendment

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

#### 13.0 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.

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

MN DIPMN DIP-DEA System Impact Study Agreement

#### 15.0 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument. Electronic signatures are acceptable if the Area EPS Operator Dakota Electric has made such a determination pursuant to MN DIPMN DIP-DEA 1.2.1.1.

#### 16.0 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.

#### 17.0 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.

# 18.0 Subcontractors

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

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

MN DIPMN DIP-DEA System Impact Study Agreement

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

19.0 Inclusion of Area EPS Operator Dakota Electric's 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 Dakota Electric, 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 Dakota Electric shall have the right to unilaterally file with the Minnesota Public Utilities Commission, pursuant to the Commission's rules and regulations, an application for change in rates, charges, classification, service, tariff, or rule or any agreement relating thereto. The Interconnection Customer shall also have the right to unilaterally file with the Minnesota Public Utilities Commission, pursuant to the Commission's rules and regulations, an application for change in rates, charges, classification, service, tariff, or rule or any agreement relating thereto. Each Party shall be have the right to protest any such filing by the other Party and/or to participate fully in any proceeding before the Minnesota Public Utilities Commission in which such modifications may be considered, pursuant to the Commission'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.

[Insert name of Area EPS Ope Interconnection Customer]	rator Dakota Electric Association [Insert name	of
Signed:	Signed:	
Name (Printed):	Name (Printed):	
Title:	Title:	
Deter	Deter	

#### Attachment 6: System Impact Study Agreement (cont'd)

#### 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 (listed below) are to be provided by the Interconnection Customer and the Area EPS Operator Dakota Electric.

The Area EPS Operator Dakota Electric 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 Dakota Electric shall list below any additional technical data that is required to adequately perform the System Impact Study. As indicated in MN DIPMN DIP-DEA section 4.3.3, this information is to be returned with the signed system impact study agreement and deposit.

# **Attachment 7: Facilities Study Agreement**

	organized and existing under the laws of the State of
	, ("Interconnection Customer,") and
	, Dakota Electric Association.
a	— Cooperative Corporation
existing under the Minnesota,	laws of the State of
	ator <u>or Dakota Electric</u> "). Interconnection Customer and Area EPS Operator red to as a "Party," or collectively as the "Parties."
	RECITALS
Resource or gener	Interconnection Customer is proposing to develop a Distributed Energy rating capacity addition to an existing Distributed Energy Resource consistent nection Application completed by the Interconnection Customer; and
	Interconnection Customer desires to interconnect the Distributed Energy  Area EPS Operator Dakota Electric's Distribution System; and
Review, and/or a	Area EPS Operator Dakota Electric has completed Initial Review, Supplements system impact study and provided the results of said review to the Customer, or determined none was required; and
to perform a distr	Interconnection Customer has requested the Area EPS Operator Dakota Electricibution facilities study to specify, and estimate the cost of, the equipment, urement and construction work needed to implement the conclusions of the w in accordance with Good Utility Practice to physically and electrically buted Energy Resource with the Area EPS Operator Dakota Electric's
	•

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard State of Minnesota Distributed Energy Resources Interconnection Procedures (MN-DIPMN DIP-DEA).
- 2.0 The Interconnection Customer elects and the Area EPS Operator Dakota Electric shall cause a distribution facilities study consistent with the standard MN DIPMN DIP-DEA to be performed. The scope of the facilities study shall be subject to data provided in Attachment A to this Agreement.
- 3.0 The distribution facilities study shall specify and estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the system impact study(s). The distribution facilities study shall also identify: 1) the electrical switching configuration of the equipment, including, without limitation, transformer, switchgear, meters, and other station equipment, 2) the nature and estimated cost of the Area EPS Operator Dakota Electric's Interconnection Facilities and Distribution Upgrades necessary to accomplish the interconnection, and 3) an estimate of the time required to complete the construction and installation of such facilities.
- 4.0 The Area EPS Operator Dakota Electric may propose to group facilities required for more than one Interconnection Customer in order to minimize facilities costs through economies of scale, but any Interconnection Customer may require the installation of facilities required for its own Distributed Energy Resource if it is willing to pay the costs of those facilities.
- 5.0 A deposit of the good faith estimate of the <u>distribution</u> facilities study costs shall be required from the Interconnection Customer and provided when the signed Agreement is provided to <u>the Area EPS Operator</u>Dakota Electric.
- Any study fees shall be based on the Area EPS Operator Dakota Electric's actual costs and will be invoiced to the Interconnection Customer within 20 Business Days after the study is completed and delivered and will include a summary of professional time.
- 7.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 20 Business Days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, the Area EPS Operator Dakota Electric shall refund such excess within 20 Business Days of the invoice without interest.
- 8.0 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.

#### 9.0 Amendment

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

#### 10.0 <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.

#### 11.0 Waiver

- 11.1. 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.
- 11.2. Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Area EPS OperatorDakota Electric. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.0 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument. Electronic signatures are acceptable if the Area EPS Operator Dakota Electric has made such a determination pursuant to MN DIPMN DIP-DEA 1.2.1.1.

#### 13.0 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.

# 14.0 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.

#### 15.0 Subcontractors

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

- 15.1. The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Area EPS Operator Dakota Electric 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.
- 15.2. The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

#### 16.0 <u>Inclusion of Area EPS Operator Dakota Electric's Tariffs 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 tariff schedules and rules applicable to the electric service provided by <a href="Dakota Electricthe Area EPS">Dakota Electricthe Area EPS</a>, which tariff schedules and rules are hereby incorporated into this Agreement by this reference. Notwithstanding any other provisions of this Agreement, <a href="the Area EPS Operator Dakota Electric">the Area EPS Operator Dakota Electric</a> shall have the right to unilaterally file with the MPUC, pursuant to the MPUC's rules and regulations, an application for change in rates, charges, classification, service, tariff, or rule or any agreement relating thereto. The Interconnection Customer shall also have the right to unilaterally file with the MPUC, pursuant to the MPUC's rules and regulations, an application for change in rates, charges, classification, service, tariff, or rule or any agreement relating thereto. Each Party shall be have the right to protest any such filing by

the other Party and/or to participate fully in any proceeding before the MPUC in which such modifications may be considered, pursuant to the MPUC's rules and regulations.

#### 17.0 Data to be provided by the Interconnection Customer with the Facilities Study Agreement

- 17.1. The Interconnection Customer shall be available to meet on site with the Area EPS Operator Dakota Electric within 5 Business Days of signing the Facilities Study Agreement. The personnel furnished by the Interconnection Customer for this site meeting shall bring detailed information on the site layout. The Area EPS Operator Dakota Electric may request the Interconnection Customer physically places stakes at the location of the major components.
- 17.2. The Interconnection Customer shall furnish a final site plan detailing the location of major equipment at the time this agreement is returned. The Point of Common Coupling (PCC) and Point of DER Connection (PoC) shall be clearly marked. The site plan shall depict any nearby roads and be labeled with the road name. Accurate dimensions shall be included on the site plan. The proper emergency (911) address, corresponding to the site, shall be labeled on the site plan.
- 17.3. The Interconnection Customer shall furnish a final one-line diagram detailing the electrical connections between major components. The oneline shall be returned with the signed Facilities Study Agreement.
- 17.4. Technical cut sheets on all equipment related to metering shall be provided by the Interconnection Customer along with the signed Facilities Study Agreement.
- 17.5. If available, copies of Conditional Use Permit(s) from all necessary authorities shall be returned by the Interconnection Customer with the signed Facilities Study Agreement.
- 17.6. The Interconnection Customer shall secure any necessary easements from private land owners prior to signing the Facilities Study Agreement. Documentation of any such agreements shall be provided to the Area EPS Operator Dakota Electric.
- 17.7. In the event that the Area EPS Operator Dakota Electric determines a site survey is necessary in order to complete a Facilities Study, the Interconnection Customer shall make good faith efforts to complete the site survey in a timely manner.
- 17.8. The Facilities Study assumes all land use permits required for the interconnection will be approved by the proper authorities. Permits are submitted after the Interconnection Agreement is signed and may impact project costs (i.e. overhead to underground requirement.)

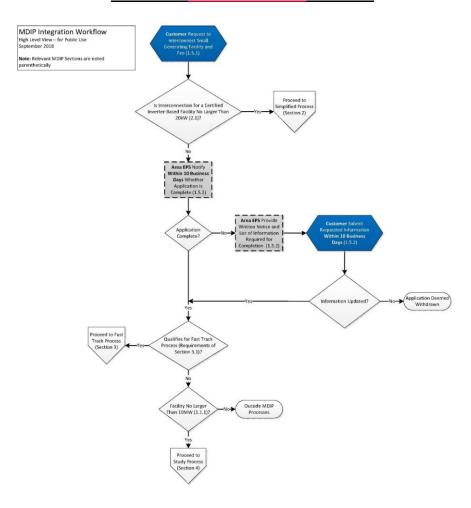
- 17.9. The Interconnection Customer and <u>Dakota Electric Area EPS Operator</u> shall provide a single point of contact for design and construction related matters. The Interconnection Customer single point of contact shall respond in a timely manner to <u>Dakota Electric's Area EPS Operator</u> questions during the Facilities Study.
- 17.10. In the event that an Interconnection Customer does not provide the necessary information described in this agreement, or if the Interconnection Customer takes more than five (5) Business Days to respond to a question during the Facilities Study, the Facilities Study timeframe shall pause until the question is resolved.

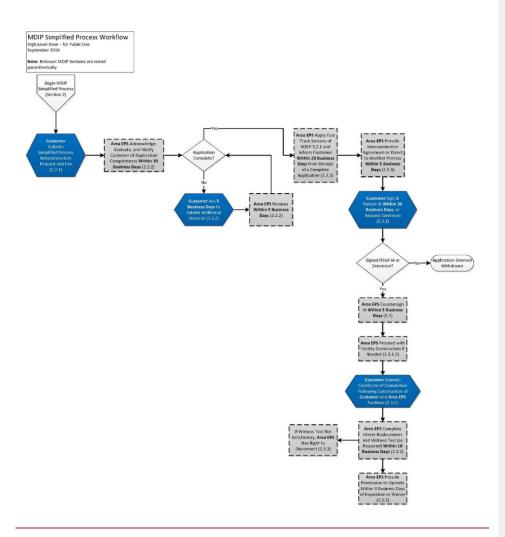
IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

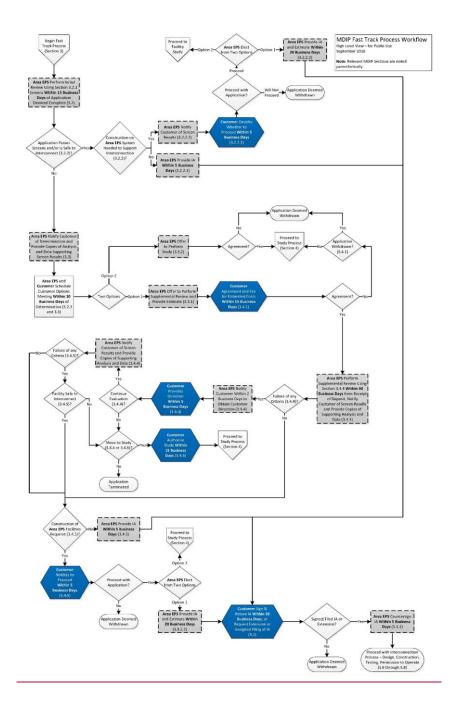
Interconnection Customer]	
Signed	Signed
Name (Printed):	Name (Printed):
Title	Title
Date:	Date:

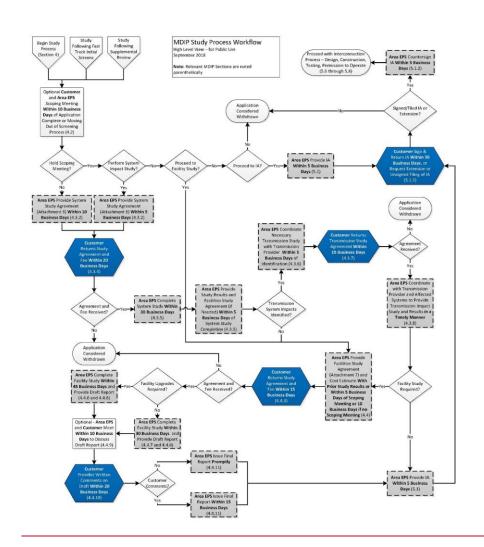
[Insert name of Area EPS Operator Dakota Electric Association] [Insert name of

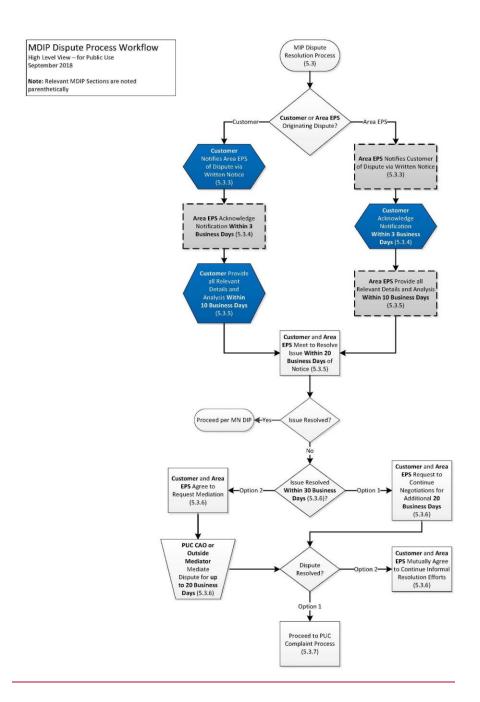
# Attachment 8: MN DIPMN DIP-DEA Flow Charts













# Minnesota Distributed Energy Resource Interconnection Agreement (MN DIAMN DIA-DEA)

(Adopted for use by Dakota Electric Association from the

Minnesota Distributed Energy Resource Interconnection Agreement MN DIA)

V. 2.3

1/3/2019

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This Interconnection Agreement ("Ag, 20, by	reement") is made and entered in the latest	nto this day of	
("Area EPS Operator"("Dakota Electr	ic"), and		
("Interconnection Customer") each has both referred to collectively as the "Pa		o individually as "Party" or	
Area EPS Operator Information:			
			Formatted: Indent: Left: 0.5"
Area EPS Operator: Electric Association			<u>a</u>
Attention:		Generation	n
Interconnection Coordinator			
Address:			
220 <sup>th</sup> St West		4300	
	Farmington St	ata.	
Minnesota Zip:55		ate:	
	Email:		
Interconnection Customer Informat	tion:		
interconnection Customer Informat	uon <u>.</u>		
			Formatted: Indent: Left: 0.5"
Address:			
		Zip:	

Phone:	Email:	
Interconnection Customer	Application No:	
Distributed Energy Resou	ce Information (To be completed by the Area EPS Operator Dakota Elect	ric)
**	em (e.g.Solar, Wind, CHP,	
Nameplate Rating	(ac)	
DER capacity (as	escribed in MN DIPMN DIP-DEA 5.14.3))(ac)	
Address of DER system:		
City <u>:</u>	State:—MN Zip code:	

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

# 1. Article 1. Scope and Limitations of Agreement

- 1.1. This Agreement is intended to provide for the Interconnection Customer to interconnect at the Point of Common Coupling and operate a Distributed Energy Resource with a Nameplate Rating of 10 Megawatts (MW) or less in parallel with <a href="https://documents.org/less-state-new-to-state-
- 1.2. This Agreement shall be used for all Interconnection Applications submitted under the Minnesota Distributed Energy Resources Interconnection Process (MN DIPMN DIPDEA) except for those submitted and processed under the Simplified Process contained in MN DIPMN DIPDEA Section 2 or qualify and chooses under MN DIPMN DIPDEA Section 1.1.5 for the Uniform Statewide Contract to replace the need for this Agreement.
- 1.3. This Agreement governs the terms and conditions under which the Interconnection Customer's Distributed Energy Resource will interconnect with, and operate in parallel with, the Area EPS Operator Dakota Electric's Distribution System.
- 1.4. Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1, the <u>MN DIPMN DIP-DEA</u>, or the body of this Agreement.

MN DER Interconnection Agreement (MN DIA <u>- DEA</u>) —— Page 4 |

- 1.5. This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity with the applicable Area EPS Operator.
- 1.6. Nothing in this Agreement is intended to affect any other agreement between the Area EPS Operator Dakota Electric and the Interconnection Customer.

#### 1.7. Responsibilities of the Parties

- 1.7.1. The Parties shall perform all obligations of this Agreement in accordance with the MN DIPMN DIP-DEA, Minnesota Technical Requirements, all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.
- 1.7.2. The Interconnection Customer shall construct, interconnect, operate and maintain its Distributed Energy Resource and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule and, in accordance with this Agreement, and with Good Utility Practice.
- 1.7.3. The Area EPS Operator Dakota Electric shall construct, operate, and maintain its Distribution System and its Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.
- 1.7.4. The Interconnection Customer agrees to construct its facilities or systems in accordance with the Minnesota Technical Requirements and this Agreement; including, applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Distributed Energy Resource so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Area EPS Operator Dakota Electric and any Affected Systems.
- 1.7.5. Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now owns or subsequently owns unless otherwise specified in the Attachments to this Agreement. Each Party shall be

responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of common coupling. The Area EPS Operator Dakota Electric and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Area EPS Operator Dakota Electric's Distribution System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

1.7.6. The Area EPS Operator Dakota Electric shall coordinate with all Affected Systems to support the interconnection.

#### 1.8. Parallel Operation Obligations

Once the Distributed Energy Resource has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Distributed Energy Resource in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for the Area EPS OperatorDakota Electric's Distribution System provided or referenced in an attachment to this Agreement and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement. The Minnesota Technical Requirements for interconnection are covered in a separate document, a copy of which has been made available to the Interconnection Customer and incorporated and made part of this Agreement by this reference.

# 1.9. Metering

As described in MN-DIPMN DIP-DEA 5.4, the Interconnection Customer shall be responsible for the Area EPS Operator Dakota Electric'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.

# 1.10. <u>Distributed Energy Resource Capabilities and Grid Reliability</u>

1.10.1. The Minnesota Technical Requirements outlines the Parties responsibilities consistent with IEEE 1547 Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces

which provides requirements relevant to the interconnection and interoperability performance, operation and testing, and, to safety, maintenance and security considerations.

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

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

#### 2.1. Equipment Testing and Inspection

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

#### 2.2. Authorization Required Prior to Parallel Operation

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

#### 2.3. Right of Access

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

Operator Dakota Electric at least five Business Days prior to conducting any onsite verification testing of the Distributed Energy Resource.

- 2.3.2. Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Area EPS Operator Dakota Electric shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.
- 2.3.3. Each Party shall be responsible for its costs associated with following this article as outlined in <u>MN DIPMN DIP-DEA</u> Section 5.7.2 and the Minnesota Technical Requirements.

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

#### 3.1. Effective Date

This Agreement shall become effective upon execution by the Parties.

#### 3.2. Term of Agreement

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

# 3.3. Termination

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

- 3.3.1. The Interconnection Customer may terminate this Agreement at any time by giving the Area EPS Operator Dakota Electric 20 Business Days written notice.
- 3.3.2. Either Party may terminate this Agreement after Default pursuant to article 7.7.
- 3.3.3. Upon termination of this Agreement, the Distributed Energy Resource will be disconnected from the Area EPS Operator Dakota Electric's Distribution System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this MN DIAMN DIA-DEA or such non-terminating Party otherwise is responsible for these costs under this MN DIAMN DIA-DEA.

- 3.3.4. The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5. The provisions of this article shall survive termination or expiration of this Agreement.

#### 3.4. Temporary Disconnection

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

#### 3.4.1. Emergency Conditions

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

#### 3.4.2. Routine Maintenance, Construction, and Repair

The Area EPS Operator Dakota Electric 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 Dakota Electric's Distribution System when necessary for routine maintenance, construction, or repairs on the Area EPS Operator Dakota Electric's Distribution System. The Area EPS Operator Dakota Electric shall use Reasonable Efforts to provide the Interconnection Customer with three Business Days notice prior to such interruption. The Area EPS Operator Dakota Electric shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

## 3.4.3. Forced Outage

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

#### 3.4.4. Adverse Operating Effects

The Area EPS Operator Dakota Electric 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 Dakota Electric'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 Dakota Electric may disconnect the Distributed Energy Resource. The Area EPS Operator Dakota Electric shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

#### 3.4.5. Modification of the Distributed Energy Resource

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

#### 3.4.6. Reconnection

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

#### 3.4.7 Treatment Similar to Other Retail Customers

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

#### 3.4.8 Disconnection for Default

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

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

#### 4.1. <u>Interconnection Facilities</u>

- 4.1.1. The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Area EPS Operator Dakota Electric shall provide a good faith estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Area EPS Operator Dakota Electric.
- 4.1.2. The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Area EPS Operator Dakota Electric's Interconnection Facilities.

#### 4.2. <u>Distribution Upgrades</u>

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

The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

# 5. Article 5. Cost Responsibility for Network Upgrades

#### 5.1. Applicability

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

#### 5.2. Network Upgrades

The Area EPS Operator Dakota Electric or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. The Area EPS Operator Dakota Electric shall work with the Transmission Owner so they can provide a good faith estimate cost, including overheads, for the purchase and construction of the Network Upgrades and provide a detailed itemization of such costs. If the Transmission Owner 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 Dakota Electric or the Transmission Owner elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

#### 5.2.1. Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to the Area EPS Operator Dakota Electric 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 Dakota Electric's Tariff and Affected System's Tariff for transmission services with respect to the Distributed Energy Resource. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1. Notwithstanding the foregoing, the Interconnection Customer, the Area EPS Operator Dakota Electric, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Area EPS Operator Dakota Electric 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 Dakota Electric 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 to Dakota Electric for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond 20 years from the commercial operation date.

5.2.1.2. If the Distributed Energy Resource fails to achieve commercial operation, but it or another Distributed Energy Resource is later constructed and requires use of the Network Upgrades within five (5) years of being constructed, the Area EPS Operator Dakota Electric and Affected System operator (after receiving payment in the amount of the cost to build these Network Upgrades from the other Distributed Energy Resource who is expected to use the Network Upgrades) shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the Distributed Energy Resource, if different, is responsible for identifying the entity to which reimbursement must be made.

# 5.3. Special Provisions for Affected Systems

Unless the Area EPS Operator Dakota Electric provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

# 5.4. Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Distributed Energy Resource.

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

#### 6.1. Billing and Payment Procedures and Final Accounting

- 6.1.1. The Area EPS Operator Dakota Electric 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 MN DIPMN DIPDEA 5.6.5, or as otherwise agreed to by the Parties.
- 6.1.1.6.1.2. Within 80 Business Days (approximately 4 calendar months) of completing the construction and installation of the Area EPS Operator Dakota Electric's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Area EPS Operator Dakota Electric shall provide the Interconnection Customer with a final accounting report, as described in the MN DIPMN DIP-DEA 5.6.6.

#### 6.2. Milestones

Pursuant to the MN DIPMN DIP-DEA 4.4.5, 5.6.2 and 5.6.3, the Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement.

#### 6.3. Financial Security Arrangements

Pursuant to the MN DIPMN DIP-DEA 5.6.4, the Interconnection Customer shall provide the Area EPS Operator Dakota Electric, 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 Dakota Electric 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 Dakota Electric's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Area EPS Operator Dakota Electric under this Agreement during its term. In addition:

- 6.3.1. The guarantee must be made by an entity that meets the creditworthiness requirements of the Area EPS Operator Dakota Electric, and contain terms and conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.
- 6.3.2. The letter of credit must be issued by a financial institution or insurer reasonably acceptable to the Area EPS Operator Dakota Electric and must specify a

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

# 7. Article 7. Assignment, Liability, Non-Warranty, Indemnity, Force Majeure, Consequential Damages, and Default

#### 7.1. Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1. Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Area EPS Operator Dakota Electric of any such assignment;
- 7.1.2. The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Area EPS Operator Dakota Electric, for collateral security purposes to aid in providing financing for the Distributed Energy Resource, provided that the Interconnection Customer will promptly notify the Area EPS Operator Dakota Electric of any such assignment.
- 7.1.3. Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

#### 7.2. Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

#### 7.3. Non-Warranty

The Area EPS Operator Dakota Electric does not give any warranty, expressed or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Interconnection

Customer, including without limitation the Distributed Energy Resource and any structures, equipment, wires, appliances or devices not owned, operated or maintained by the Area EPS Operator Dakota Electric.

#### 7.4. Indemnity

- 7.4.1. This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.
- 7.4.2. The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.
- 7.4.3. This is indemnification obligation shall apply notwithstanding any negligent or intentional acts, errors or omissions of the Indemnified Party, but the Indemnifying Party's liability to indemnify the Indemnified Party shall be reduced in proportion to the percentage by which the Indemnified Party's negligent or intentional acts, errors or omissions caused the damage.
- 7.4.4. Neither Party shall be indemnified for its damages resulting from its sole negligence, intentional acts or willful misconduct. These indemnity provisions shall not be construed to relieve any insurer of its obligation to pay claims consistent with the provisions of a valid insurance policy.
- 7.4.5. If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
- 7.4.6. If an indemnifying party is obligated to indemnify and hold any indemnified person harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

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

#### 7.5. Consequential Damages

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

#### 7.6. Force Majeure

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

#### 7.7. Default

7.7.1. No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting

Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

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

#### 8. Article 8. Insurance

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

#### 9. Article 9. Confidentiality

- 9.1. Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement, design, operating specifications, and metering data provided by the Interconnection Customer may be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such. If requested by either Party, the other Party shall provide in writing the basis for asserting that the information warrants confidential treatment. Parties providing a Governmental Authority trade secret, privileged or otherwise not public or nonpublic data under the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13, shall identify such data consistent with the Commission's September 1, 1999 Revised Procedures for Handling Trade Secret and Privileged Data, available online at: <a href="https://mn.gov/puc/puc-documents/#4">https://mn.gov/puc/puc-documents/#4</a>
- 9.2. Confidential Information does not include information previously in the public domain with proper authorization, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be publicly divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements that could not otherwise be fulfilled by not making the information public.
  - 9.2.1. Each Party shall hold in confidence and shall not disclose Confidential Information, to any person (except employees, officers, representatives and agents, who agree to be bound by this section). Confidential Information shall be clearly marked as such on each page or otherwise affirmatively identified. If a court, government agency or entity with the right, power, and authority to do so, requests or requires either Party, by subpoena, oral disposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party with prompt notice of such request(s) or requirements(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of this Agreement. In the absence of a protective order or waiver the Party shall disclose such confidential information which, in the opinion of its counsel, the party is legally compelled to disclose. Each Party will use reasonable efforts to obtain reliable assurance that confidential treatment will be accorded any confidential information so furnished.

- 9.2.2. Critical infrastructure information or information that is deemed or otherwise designated by a Party as Critical Energy/Electric Infrastructure Information (CEII) pursuant to FERC regulation, <u>18 C.F.R.</u> §388.133, as may be amended from time to time, may be subject to further protections for disclosure as required by FERC or FERC regulations or orders and the disclosing Party's CEII policies.
- 9.2.3. Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.
- 9.2.4. Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

#### 10. Article 10. Disputes

- 10.1. The Parties agree to attempt to resolve all disputes arising out of the interconnection process and associated study and interconnection agreements according to the provisions of this article and Minnesota Administrative Rules 7829.1500-7829.1900. More information on the Commission's Consumer Affairs Office dispute resolution services is available on the Commission's website: <a href="https://mn.gov/puc/consumers/help/complaint/">https://mn.gov/puc/consumers/help/complaint/</a>
- 10.2. Prior to a written Notice of Dispute, the Party shall contact the other Party and raise the issue and the relief sought in an attempt to resolve the issue immediately.
- 10.3. In the event of a dispute, the disputing Party shall provide the other Party a written Notice of Dispute containing the relevant known facts pertaining to the dispute, the specific dispute and the relief sought, and express notice by the disputing Party that it is invoking the procedures under this article. The Interconnection Customer may utilize the Commission's Consumer Affairs Office's complaint/inquiry form and Informal Complaint dispute resolution process to assist with the written Notice of Dispute. The notice shall be sent to the non-disputing Party's email address and physical address set forth in the interconnection agreement or Interconnection Application, if there is no interconnection agreement. If the Interconnection Customer chooses not to utilize the Commission's Consumer Affair Office dispute resolution process, the Interconnection Customer shall provide an informational electronic copy of the Notice of Dispute to the Consumer Affairs Office at the Commission at consumer.puc@state.mn.us.

- 10.4. The non-disputing Party shall acknowledge the notice within three (3) Business Days of its receipt and identify a representative with the authority to make decisions for the non-disputing Party with respect to the dispute.
- 10.5. The non-disputing Party shall provide the disputing Party with relevant regulatory and/or technical details and analysis regarding the Area EPS Operator Dakota Electric interconnection requirements under dispute within ten (10) Business Days of the date of the Notice of Dispute. Within twenty (20) Business Days of the date of the Notice of Dispute, the Parties' authorized representatives will be required to meet and confer to try to resolve the dispute. Parties shall operate in good faith and use best efforts to resolve the dispute.
- 10.6. If a resolution is not reached in the thirty (30) Business Days from the date of the notice described in section 10.3, the Parties may 1) if mutually agreed, continue negotiations for up to an additional twenty (20) Business Days; or 2) either Party may request the Commission's Consumer Affairs Office provide mediation in an attempt to resolve the dispute within twenty (20) Business Days with the opportunity to extend this timeline upon mutual agreement. Alternatively, both Parties by mutual agreement may request mediation from an outside third-party mediator with costs to be shared equally between the Parties.
- 10.7. If the results of the mediation are not accepted by one or more Parties and there is still disagreement, the dispute shall proceed to the Commission's Formal Complaint process as described in Minn. Rules 7829.1700-1900 unless mutually agreed to continue with informal dispute resolution.
- 10.8. At any time, either Party may file a complaint before the Commission pursuant to Minn. Stat. §216B.164, if applicable, and Commission rules outlined in Minn. Rules Ch. 7829.

#### 11. Article 11. Taxes

- 11.1. The Parties agree to follow all applicable tax laws and regulations, consistent with Internal Revenue Service and any other relevant local, state and federal requirements.
- 11.2. Each Party shall cooperate with the other to maintain the other Party's tax status. It is incumbent on the Party seeking to maintain its tax status to provide formal written notice to the other Party detailing what exact cooperation it is seeking from the other Party well prior to any deadline by which any such action would need to be taken. Nothing in this Agreement is intended to adversely affect, if applicable, the Area EPS

Operator Dakota Electric's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

#### 12. Article 12. Miscellaneous

#### 12.1. Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the Minnesota Public Utilities Commission and the laws of the state of Minnesota, without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

#### 12.2. Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties under the process described below, or under article 12.12 of this Agreement.

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

- 12.2.1. File a Petition with the Commission, or
- 12.2.2. File a Notice with the Commission of the proposed amendment. The Notice should include a copy of the amendment showing in redline format how the amendment would alter the MN DIAMN DIA-DEA between the Area EPS Operator Dakota Electric and Interconnection Customer for the Interconnection Application at issue. If no objection or notice of intent to object is filed within 30 days, then the proposed amendment would be considered to be approved by the Commission. If there is a timely filed objection of notice of intent to object, then the proposed amendment would not be considered to have been approved by the Commission and could only be used if the Commission subsequently issues a written order authorizing its use.
- 12.2.3. Commission approval of an amendment to the Interconnection Agreement is not needed where such an amendment only addresses updating or correcting: 1)

information specified in the Interconnection Application; 2) exhibits or attachments to the Interconnection Agreement as long as they are not additional agreements or requirements not covered in the <a href="MN-DIPMN DIP-DEA">MN-DIPMN DIP-DEA</a> or Minnesota Technical Requirements; or 3) information provided in the blank lines to the <a href="MN-DIAMN DIA-DEA">MN-DIAMN DIA-DEA</a> or Uniform Statewide Contract forms.

#### 12.3. No Third-Party Beneficiaries

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

12.4. Waiver

- 12.4.1. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 12.4.2. Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Area EPS Operator Dakota Electric. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5. Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement. This Agreement can only be amended or modified in writing signed by both Parties.

#### 12.6. <u>Multiple Counterparts</u>

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This Agreement may be executed in two or more counterparts, each of which is deemed an <u>original</u>, but all constitute one and the same instrument. Electronic signatures are acceptable if <u>the Area EPS Operator Dakota Electric</u> has made such a determination pursuant to <u>MN DIPMN DIP-DEA</u> 1.2.1.1.

#### 12.7. No Partnership

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

#### 12.8. <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.

#### 12.9. <u>Security Arrangements</u>

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10. Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Distributed Energy Resource or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11. <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; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

- 12.11.1. The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Area EPS Operator Dakota Electric be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.
- 12.11.2. The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.
- 12.12. Inclusion of Dakota Electric 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 Dakota Electric, 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 Dakota Electric shall have the right to unilaterally file with the Minnesota Public Utilities Commission pursuant to the Commission's rules and regulations, an application for change in rates, charges, classification, service, tariff, or rule or any agreement relating thereto. The Interconnection Customer shall also have the right to unilaterally file with the Commission, pursuant to the Commission's rules and regulations, an application for change in rates, charges, classification, service, tariff, or rule or any agreement relating thereto. Each Party shall be have the right to protest any such filing by the other Party and/or to participate fully in any proceeding before the Commission in which such modifications may be considered, pursuant to the Commission's rules and regulations.

#### 13. Article 13. Notices

#### 13.1. General

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

If to the Interconnection Customer:	Formatted: Font: Bold	
Interconnection Customer:	Tomateu. Tom. Bold	
miterconnection Customer:		
Attention:		
Address:		
City: State: Zip:		
Phone: Email:		
If to <u>Dakota Electric Association</u> the Area EPS Operatorthe Area EPS Operator:	Formatted: Font: Bold	
Area EPS Operator:  ——Dakota Electric		
Association		
Attention:Generation Interconnection  Coordinator_		
Address:4300		
220 <sup>th</sup> St West		

	City:	
	Phone: (651) 463-6261 Email:	
13.2.	Billing and Payment Billings and payments shall be sent to the addresses set out below:	
	Interconnection Customer:	Formatted: Font: Bold
	Attention:Address:	
	City: State: Zip:	
	Area EPS Operator:	Formatted: Font: Bold
	Association Attention: Generation Interconnection Coordinator	
	Address:	
	City:	
13.3.	Alternative Forms of Notice  Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone or email to the telephone numbers and e-mail addresses set out below:	
MN DER II	nterconnection Agreement (MN DIA-DEA) —— -Page 30	

If to the Interconnection Customer:	Formatted: Font: Bold
Interconnection Customer:	
Attention:	
Address:	
City: State: Zip:	
Phone: Email:	
	Formatted: Font: Bold
Association	
Association Dakota Electric	
Attention:Generation Interconnection  Coordinator	
Address:	
220 <sup>th</sup> St West  City:Farmington	
State:: MNZip::55024	
Phone: (651) 463-6261 Email:	
Designated Operating Representative	
The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agraement. This person will also some as the point of contact with respect to	
this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.	

13.4.

erconnection Customer's Operating Representative:	Formatted: Font: Bold
nterconnection Customer:	
<u> </u>	
Attention:	
Address:	
- Cian	
City: State: Zip:	
Phone: Email:	
Dakota Electric Association's Area EPS Operator's Operating Representative:	Formatted: Font: Bold
A <del>rea EPS Operator:</del>	
Area EPS Operator: —Dakota Electric	
Area EPS Operator:  —Dakota Electric  Association	
Area EPS Operator:  —Dakota Electric  Association  Attention:  —Generation Interconnection	
Area EPS Operator:	

notice to the other Party prior to the effective date of the change.

13.5.

14. Article 14. Signatures	Formatted: Heading 1
N WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their espective duly authorized representatives.	
Or the Area EPS Operator Dakota Electric Association	Formatted: Font: Bold
Signature:	
Name:	Formatted: Indent: Left: 0.5"
(Print Name)	
Title:	Formatted: Indent: Left: 0.5"
Date:	
or the Interconnection Customer	Formatted: Font: Bold
Signature:	
Name:	Formatted: Indent: Left: 0.5"
(Print Name)	
Title:	Formatted: Indent: Left: 0.5"
Date:	
N DER Interconnection Agreement (MN DIA-DEA)	
1	

#### Attachment 1: Glossary of Terms

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

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

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

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

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

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

Confidential Information – See MN DIAMN DIA-DEA Article 9.

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

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

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

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

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

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

**Fast Track Process** – The procedure as described in <u>MN-DIPMN DIP-DEA</u> Section 3 for evaluating an Interconnection Application for a Distributed Energy Resource that meets the eligibility requirements of <u>MN-DIPMN DIP-DEA</u> section 3.1

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

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

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

**Interconnection Agreement** – The terms and conditions between the Area EPS Operator and Interconnection Customer (Parties). See <u>MN-DIPMN DIP-DEA</u> Section 1.1.5 for when the Uniform Statewide Contract or <u>MN-DIAMN DIA-DEA</u> applies.

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

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

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

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

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

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MN DIAMN DIA-DEA - The <u>Dakota Electric Association version of the Minnesota Distributed</u>
Energy Resource Interconnection Agreement. See <u>MN DIPMN DIP-DEA</u> Section 1.1.5 for when the Uniform Statewide Contract or <u>MN DIAMN DIA-DEA</u> applies.

**MN-DIPMN DIP-DEA** – The <u>Dakota Electric Association version of the</u> -Minnesota Distributed Energy Resource Interconnection Process outline the statewide interconnection standards.

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

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

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

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

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.

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

**Party or Parties** – The Area EPS Operator Dakota Electric Association 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.

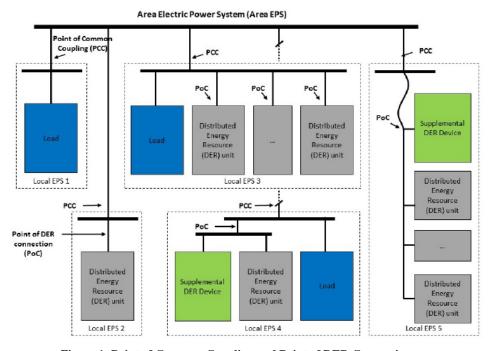


Figure 1: Point of Common Coupling and Point of DER Connection

(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 <a href="MN-DIP-MN DIP-DEA">MN-DIP-MN DIP-DEA</a> sections 1.5.2 and 1.8.

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

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

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

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

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

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

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

Transmission Provider. The Transmission Provider may include the Independent System Operator or Regional Transmission Operator.

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

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

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

## Attachment 2: Description and Costs of the Distributed Energy Resource, Interconnection Facilities, and Metering Equipment

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

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

A description of the Generation System, including a single-line diagram showing the general arrangement of how the Interconnection Member's Generation System is interconnected with Dakota Electric's distribution system. At a minimum the single-line diagram shows the following:

- 1) Electrical relationship of Interconnection Facilities to each other
- 2) Point of Common Coupling (PCC)
- 3) Point of DER Connection (PoC)
- 4) Location of meter(s)
- 5) Equipment ownership

#### Attachment 4: Milestones

be number of Busines different Milestone de	(1) below may be a calendar date. As Days from the calendar date in line escribed in a specified line number. So the number of Business Days from	Similarly, the anticipated In-Service
In-Service Date:		
Critical milestones an	nd responsibility as agreed to by the	Parties:
	Milestone/Anticipated Date	Responsible Party
(1)		
(2)		
(7)		
(8)		
(9)		
(10)		
Agreed to by:		
*	eratorDakota Electric	
DateFor the Transmission		Date

MN DER Interconnection Agreement (MN DIA - DEA) —— Page 43 |

For the Interconnection Customer	Date

Attachment 5: Additional Operating and Maintenance Requirements for the Area EPS Operator Dakota Electric's Distribution System and Affected Systems Needed to Support the Interconnection Customer's Needs

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

# Attachment 6: <u>Dakota Electric</u>Area EPS Operator's Description of Distribution and Network Upgrades and Good Faith Estimates of Upgrade Costs

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

## Attachment 7: Assignment of Minnesota Distributed Energy Resource Interconnection Agreement (MN DIAMN DIA-DEA)

This is an Assignment of Interconnection Agreement ("Assignment").

There is an Interconnection Agreement, including any and all Attachments thereto including any
and all amendments ("Agreement") by and between Dakota Electric
Association————————————————————————————————————
Operator"), having its principal office and place of business located at 4300 220th Street
W
current party to the Interconnection
Agreement] ("Assignor"), originally signed by the Area EPS Operator Dakota Electric on [insert
date of signature to Interconnection Agreement by <u>Dakota Electric</u> <del>Area EPS Operator</del> ] for a
Distributed Energy
Resource (DER) with a Nameplate Rating of kW (AC) located at [insert address].

The Assignor intends to convey its interest in the above-referenced DER to [insert name of new purchaser of the service address shown in Interconnection Application and in one line diagram attached to Agreement] ("Assignee"), and the Assignor intends to assign the Agreement to the Assignee.

Upon the execution of this Assignment by the Assignor, Assignee and the Area EPS Operator Dakota Electric, 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 Dakota Electric 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 <u>Dakota Electric Area EPS Operator</u> under the Agreement to either the Assignor or the Assignee shall be deemed to have been made to both and shall discharge the <u>Area EPS Operator Dakota Electric</u> 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 Dakota Electric, occurring or accruing under the Agreement on or before the date of the signature of the Area EPS Operator Dakota Electric to this Assignment shall be deemed to be the obligation of both the Assignor and Assignee, and the Area EPS Operator Dakota Electric 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 3 of the Agreement, and in Articles 13.1, 13.2, 13.3, and 13.4 of the Agreement.

Page 3	Interconnection Customer:	
	Attention:	
	Address:	
	City:State:	Zip:
	Phone: Email:	_
Article 13.1	Interconnection Customer:	
General	Attention:	
	Address:	
	City: State:	Zip:
	Phone: Email:	_
Article 13.2	Interconnection Customer:	
Billing and	Attention:	
Payment	Address:	
	City:State:	_ Zip:
		-
Article 13.3	Interconnection Customer:	
Alternative	Attention:	
Forms of	Address:	
Notice	City: State:	Zip:
	Phone: Email:	
Article 13.4	Interconnection Customer's Operating Representative:	
Designated		
Operating	Interconnection Customer:	
Representative		
	Attention:	
	Address:	
	City: State:	Zip:
	Phone: Email:	

		es, or signatures to this Assig		Formatted: Font: Bold
		original signatures. Photocop ment, shall have the same val		
The Area EPS Operators of the	⊭ <u>Dakota Electric</u> , Assigno	r, and Assignee have execute	ed this Assignment	
dates as set forth belov	v.			
<b>Assignor</b> (include nar	ne of legal entity)			
Signature:			4	Formatted: Indent: Left: 0.5"
Name:				
Title:				
Dakota Electric Assoc	iation <del>Area EPS Operator</del>	: (include name of legal		
entity)				
Signature:			4	Formatted: Indent: Left: 0.5"
Name:				
Title:				
Date:				
<b>Assignee</b> (include nan	ne of legal entity)			
9 (	<i>y</i> 0 <i>y</i> /			

Signature:	•	Formatted: Indent: Left: 0
Name:		
Title:		

Date: \_\_\_\_



### State of Minnesota

## Distributed Energy Resources Interconnection Process

(MN DIP-DEA)

(Adopted for use by Dakota Electric Association from the

Minnesota Distributed Energy Resource Interconnection Process MN DIP)

v.2.3

1/3/2018

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ATTACHMENT 1: PRE-APPLICATION REPORT REQUEST FORM

**ATTACHMENT 2: SIMPLIFIED APPLICATION FORM** 

EXHIBIT A - TERMS AND CONDITIONS FOR INTERCONNECTING AN INVERTER-BASED DER NO LARGER THAN 20 KW

**EXHIBIT B - FOR ENERGY STORAGE** 

**EXHIBIT C – CERTIFICATE OF COMPLETION** 

ATTACHMENT 3: INTERCONNECTION APPLICATION FORM

**ATTACHMENT 4: CERTIFICATION CODES AND STANDARDS** 

ATTACHMENT 5: CERTIFICATION OF DISTRIBUTED ENERGY RESOURCE EQUIPMENT

ATTACHMENT 6: SYSTEM IMPACT STUDY AGREEMENT

**ATTACHMENT 7: FACILITIES STUDY AGREEMENT** 

**ATTACHMENT 8: FLOW CHARTS** 

#### **Foreword**

The Minnesota Public Utilities Commission is charged by Minnesota Statute §216B.1611 to establish generic, statewide standards for the interconnection and parallel operation of distributed energy resources<sup>1</sup> of no more than 10 MW. In updating Minnesota's interconnection standards, we strive to:

- 1) Establish a practical, efficient interconnection process that is easily understandable for everyone involved;
- 2) Maintain a safe and reliable electric system at fair and reasonable rates;
- 3) Give maximum possible encouragement of distributed energy resources consistent with protection of the ratepayers and the public;
- 4) Be consistent statewide and incorporate newly revised national standards;
- 5) Be technology neutral and non-discriminatory.

At a minimum, these standards must:

- 1) To the extent possible, be consistent with industry and other federal and state operational and safety standards;
- 2) Provide for the low-cost, safe, and standardized interconnection of distributed energy resources;
- 3) Take into account differing system requirements and hardware; as well as, the overall demand load requirements of individual utilities;
- 4) Allow for reasonable terms and conditions, consistent with the cost and operating characteristics of the various technologies, so that a utility can reasonably be assured of the reliable, safe and efficient operation of the interconnected equipment;
- 5) Establish a standard interconnection agreement that sets forth the contractual terms under which a company and customer agree that one or more facilities may be interconnected with the company's utility system; and standard applications for interconnection and parallel operation with the utility system.

This standards document is modelled after the Federal Energy Regulatory Commission's Small Generator Interconnection Process (FERC SGIP), and explains the process to interconnect Distributed Energy Resources for parallel operation with the Area Electrical Power System (Area EPS); including templates for applications and study agreements. There are three companion documents: 1) Minnesota Distributed Energy Resource Interconnection Agreement (MN DIA-DEA); 2) Minnesota Distributed Energy Resource Technical Interconnection and Interoperability Requirements (MN TIIR)<sup>2</sup>; and until updated or replaced 3) Attachment 6 Rates from the

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<sup>&</sup>lt;sup>1</sup> "Distributed Energy Resources" (DER) is emerging terminology used to capture both traditional "distributed generation" and storage technologies; however, this term is not currently defined in Minnesota statute or rules, and at times the Commission applies it to a broader category that includes demand-side management (controlling load like air conditioners or water heaters) and, in some cases, even energy efficiency and electric vehicles. For this document, the definition is consistent with IEEE 1547 and limited to generation and storage, and does not include DER that behave solely as load.

<sup>&</sup>lt;sup>2</sup> See MN DIP-DEA

statewide interconnection standards adopted in 2004 (September 28, 2004 Order in E-999/CI-01-1023.)

The Commission is grateful to the participants of the Distributed Generation Workgroup comprised of representatives of Minnesota's utilities, distributed energy resource industries, and consumers who informed this update of the state's interconnection standards. As these standards go into effect and more distributed energy resources interconnect with utility systems, the Commission expects this to be a living document.

### **Section 1. Application**

# 1.1 Applicability

- 1.1.1 The Minnesota Distributed Energy Resources Interconnection Process (MN DIP-DEA) applies to any Distributed Energy Resource (DER) no larger than 10 MW interconnecting to, and operating in parallel with, Dakota Electric's system in Minnesota.<sup>3</sup> See Minnesota Technical Requirements for more detail on what constitutes parallel operation. For the applicable interconnection process for DERs larger than 10 MW interconnected to, and operated in parallel with, Dakota Electric's system in Minnesota, contact Dakota Electric for details on the applicable interconnection process. The exception is Distributed Energy Resource interconnections that are subject to Federal Energy Regulatory Commission (FERC) jurisdiction.<sup>4</sup>
  - 1.1.1.1 An application to interconnect a certified<sup>5</sup>, inverter-based DER no larger than 20 kilowatts (kW) shall be evaluated under the Section 2 Simplified Process.
  - 1.1.1.2 An application to interconnect a DER shall be evaluated under the Section 3 Fast Track Process if the eligibility requirements of Section 3.1 Applicability
  - 1.1.1.3 An application to interconnect a DER that does not meet the Simplified Process or Fast Track Process eligibility requirements, or does not pass the review as described in either process, shall be evaluated under the Study Process.

Attachment 4: Certification Codes and Standards regarding statewide technical requirements in the interim between adoption of MN DIP-DEA and adoption of an updated MN TIIR.

<sup>&</sup>lt;sup>3</sup> Minnesota Statute §216B.1611

<sup>&</sup>lt;sup>4</sup> The Federal Regulation and Development of Power Act (<u>16 U.S. Code Subchapter II</u>) outlines federal regulation of wholesale sales and transmission in interstate commerce and state regulation of generation, distribution, and retail sales.

- 1.1.1.4 Attachment 8 contains flow charts that provide an overview of the Simplified Process, the Fast Track Process, and the Study Process.
- 1.1.1.5 Prior to submitting an Interconnection Application, the Interconnection Customer may ask Dakota Electric's Interconnection Coordinator whether the proposed interconnection is subject to these procedures. Dakota Electric shall respond within fifteen (15) Business Days.
- 1.1.2 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms or the body of these procedures. All references to DER Nameplate Rating or maximum capacity as described in 5.14.36 herein are in alternating current (AC).
- 1.1.3 Neither these procedures nor the requirements included hereunder unless by mutual agreement of Dakota Electric and the Interconnection Customer apply to DERs interconnected, approved for interconnection or Interconnection Applications submitted to by Dakota Electric prior to June 17, 2019, and later deemed complete (provided these applications are later deemed complete following any applicable revisions no later than 60 days following this date). These procedures and the requirements hereunder shall apply to applications to modify existing DERs if the application to modify is submitted on or after June 17, 2019.
  - 1.1.3.1 Nothing in this MN DIP-DEA affects an Interconnection Customer's Queue Position assigned before the effective date of this MN DIP-DEA. The Parties agree to complete work on any interconnection study agreement executed prior to the effective date of this MN DIP-DEA in accordance with the terms and conditions of that interconnection study agreement. Any new studies or other additional work will be completed pursuant to this MN DIP-DEA.
- Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices.
- 1.1.5 References in these procedures to an Interconnection Agreement are to the Uniform Statewide Contract or Minnesota Distributed Energy Resource Interconnection Agreement (MN DIA-DEA).
  - 1.1.5.1 The Uniform Statewide Contract (Minn. R. 7835.9910) replaces the need to use the MN DIA-DEA if all of the following

Dakota Electric DER Pre-Application Report Form

<sup>&</sup>lt;sup>6</sup> See Minnesota Technical Requirements for more detail on when to apply Nameplate Rating or a limited maximum capacity as defined in 5.14.3.

conditions are met and the Interconnection Customer does not request the MN DIA-DEA:

1.1.5.1.1 Certified equipment
1.1.5.1.2 40 kWac or less of a qualifying DER Capacity
1.1.5.1.3 No Dakota Electric system modifications are required to accommodate the DER;
1.1.5.1.4 Signed Uniform Statewide Contract Attachment 1: Pre-Application Report Request Form

# **Pre-Application Report Request**

Persons interested in finding out the additional information regarding the interconnection of a distributed energy resource to Dakota Electric's distribution system are to fill out this Pre-Application Report Request. The preapplication report request is to be filled out as completely as possible by the applicant. Dakota Electric will provide the applicant with a Pre-Application Report within 15 business days once the completed Pre-Application Report Request and a \$300 fee is submitted to Dakota Electric.

<b>Distributed Energy Resource Inform</b>	mation				
Project Address:					
City:			State:	7	Zip Code:
GPS Coordinates:		Nearby Cross Str	eets:	l .	
Location of the Proposed Point of Commo	on Couplin	ng (e.g. meter numb	per or pole n	umber):	
DER Type (Check all that apply):					
DER Type (Check an mai appry).					
☐ Solar Photovoltaic	☐ Wind	1		Battery Storag	e
☐ Combined Heat and Power	☐ Solar Thermal ☐		Other (please	specify)	
			*		
Total Aggregate Nameplate Rating of Pro	posed DE	R System (kW AC)	:		
Phase Configuration of Proposed DER Sy	ystem			☐ Single	☐ Three
Service Voltage of Proposed DER System				Volts	
Will this be a stand-alone generator not interconnected to onsite load (not including station service)?			□ Yes	□ No	

Please attach copy of site map for proposed project and any additional information that may be helpful in fulfilling the pre-application request. Site map should include true north, proposed project location including general layout, proposed service point location and major roadways.

For Office Use Only					
Date Received:	Application Fee Received	d: □ Y	es □ No		
Date Completed Pre-Application Report Sent to Appl	Date Completed Pre-Application Report Sent to Applicant:				
Point of Interconnection – Additional Informa	tion				
Is the proposed interconnection to an existing service? (If no, applicant is to skip to the next section.)					
Customer Name:	(	Customer Accor	unt Number:		
Existing loads at site (kWAC):			_		
List future additional loads planned for at site (in kW.	AC):				
<b>Project Contact Information</b>					
Full Name:					
Name of Business:					
Street Address:					
City:	State:		Zip Code:		
Email:	Phone	<b>:</b>			
Payment and Agreement					

There is a non-refundable \$300 fee for the construction of a pre-application report. By signing this document, I acknowledge and understand that:

- Neither review of this application nor construction of any report shall begin until the full amount of the fee has been paid to Dakota Electric.
- Dakota Electric shall provide a report with only the available information on the proposed point of interconnection.
- The information provided by Dakota Electric may become outdated and not useful at the time of submission of a complete Interconnection Application.
- The confidentiality provision as listed in Section 5.9 of the Minnesota Distributed Energy Resource Interconnection Process MN DIP-DEA apply.

•	Upon receipt of the report no guarantee is made by Application will be approved for this proposed site	
	Applicant Signature:	Date:

\*\*\*Please print clearly or type and return completed along with any additional documentation\*\*\*

- 1.1.5.1.5 Attachment 2: Simplified Application Form Attachment 2: Simplified Application
- 1.1.5.1.6 Dakota Electric may propose in its tariff an increase to the size threshold for the application of the Uniform Statewide Contract as a replacement for the MN DIA-DEA in its tariff. There may also be situations where the Interconnection Customer would need to sign both the Uniform Statewide Contract and the MN DIA-DEA; such as, where the Nameplate Rating of the system is above the size threshold where the Uniform Statewide Contract replaces the MN DIA-DEA but the DER qualifies for net metering (Minn. Stat.§216B.164 and Minn. R. Ch. 7835) under the Uniform Statewide Contract.
- 1.1.5.2 The reference to Interconnection Agreement also applies when Dakota Electric and Interconnection Customer modify MN DIA-DEA-DEA with Commission approval.
- 1.1.6 Dakota Electric and Interconnection Customer may jointly seek Commission approval of an amendment to the MN DIA-DEA-DEA for use between them for a specific Interconnection Application in the following ways:
  - 1.1.6.1 File a Petition with the Commission, or
  - 1.1.6.2 File a Notice with the Commission of the proposed amendment. The Notice should include a copy of the amendment showing in redline format how the amendment would alter the MN DIA-DEA between Dakota Electric and Interconnection Customer for the Interconnection Application at issue. If no objection or notice of intent to object is filed within 30 days, then the proposed amendment would be considered to be approved by the Commission. If there is a timely filed objection of notice of intent to object, then the proposed amendment would not be considered to have been approved by the Commission and could only be used if the Commission subsequently issues a written order authorizing its use.
- 1.1.7 Commission approval of an amendment to the Interconnection Agreement is not needed where such an amendment only addresses updating or correcting: 1) information specified in the Interconnection Application; 2) exhibits or attachments to the Interconnection Agreement as long as they are not additional agreements or requirements not covered in the MN DIP-DEA or MN Technical Requirements; or 3) information provided in the blank lines to the MN DIA-DEA or Uniform Statewide Contract forms.

# 1.2 Online Applications and Electronic Submission

- 1.2.1 Dakota Electric shall allow Pre-Application Report requests and Interconnection Applications to be submitted electronically; such as, through Dakota Electric's website or via email. Dakota Electric may allow the Interconnection Agreement to be submitted electronically.
  - 1.2.1.1 Dakota Electric may allow for electronic signatures to be used for the Pre-Application Report request, Interconnection Application and related agreements, including the Interconnection Agreement, and forms.
- 1.2.2 Dakota Electric shall dedicate a page on their website or direct customers to a website with generic information on the MN DIP-DEA that Dakota Electric finds comports with its process. The relevant information that shall be available to the Interconnection Customer via a website includes:
  - 1.2.2.1 The MN DIP-DEA and attachments in an electronically searchable format;
  - 1.2.2.2 Dakota Electric's Interconnection Application and all associated forms in a format that allows for electronic entry of data;
  - 1.2.2.3 The Uniform Statewide Contract and Dakota Electric's tariff version of the MN DIA-DEA;
  - 1.2.2.4 Example documents; including, at a minimum, an example one-line diagram with required labels; and
  - 1.2.2.5 Contact information for Dakota Electric's DER interconnection coordinator(s) and submission of Interconnection Applications, including email and phone number.

#### 1.3 Communications

1.3.1 Dakota Electric shall designate a DER interconnection coordinator(s) and this person or persons shall serve as a single point of contact from which general information on the application process and on Affected System(s) can be obtained through informal request from the Interconnection Customer presenting a proposed project for a specific site. The name, telephone number, and e-mail address of such contact employee or office shall be made available on Dakota Electric's Internet website in accordance with section 1.2.2.5. Dakota Electric may have several DER Interconnection Coordinators assigned. The DER Interconnection Coordinator shall be available to provide coordinator assistance with the Interconnection Customer, but is not responsible to directly answer or resolve all of the issues involved in review and implementation of the interconnection process and standards. Upon request, electric system information provided to the Interconnection Customer should include relevant system study results, interconnection studies, and other materials useful to an understanding of an

interconnection at a particular point on Dakota Electric's System, to the extent such provision does not violate the privacy policies of the Commission, confidentiality provisions of prior agreements or critical infrastructure requirements. This listing does not include a Pre-Application Report under Section 1.4. Dakota Electric shall comply with reasonable requests for such information.

- 1.3.2 The Interconnection Customer may designate, on the Interconnection Application or in writing after the Application has been submitted, an Application Agent to serve as the single point of contact to coordinate with the DER Interconnection Coordinator on their behalf. Designation of an Application Agent does not absolve the Interconnection Customer from signing interconnection documents and the responsibilities outlined in the MN DIP-DEA and Interconnection Agreement.
- 1.3.3 Engineering Communication: Upon request of either party or the Commission, for the purpose of exchanging information regarding an active Interconnection Application, Dakota Electric and the Interconnection Customer shall each identify one point of contact with technical expertise for their organizations.

# 1.4 <u>Pre-Application Report</u>

- 1.4.1 In addition to the information described in section 1.3.1, which may be provided in response to an informal request, an Interconnection Customer may submit a formal written request form along with a non-refundable fee of \$300 for a Pre-Application Report on a proposed project at a specific site. Dakota Electric shall provide the data described in section 1.4.2 to the Interconnection Customer within fifteen (15) Business Days of receipt of the completed request form and payment of the \$300 fee. The Pre-Application Report produced by Dakota Electric is non-binding, does not confer any rights, and the Interconnection Customer must still successfully apply to interconnect to Dakota Electric's system. The written Pre-Application Report request form shall include the information in sections 1.4.1.1 through 1.4.1.8 below to clearly and sufficiently identify the location of the proposed Point of Common Coupling.
  - 1.4.1.1 Project contact information, including name, address, phone number, and email address.
  - 1.4.1.2 Project location (street address with nearby cross streets and town). Interconnection Customer may choose to also provide an aerial map or GPS coordinates for increased accuracy.
  - 1.4.1.3 Meter number, pole number, or other equivalent information identifying proposed Point of Common Coupling, if available.
  - DER type(s) (e.g., solar, wind, combined heat and power, storage, solar + storage, etc.).
  - 1.4.1.5 Nameplate Rating (alternating current kW).
  - 1.4.1.6 Single or three phase DER configuration.

- 1.4.1.7 Stand-alone generator (no onsite load, not including station service Yes or No?).
- 1.4.1.8 Is new service requested? Yes or No? If there is existing service, include the customer account number, site minimum and maximum current or proposed electric loads in kW (if available) and specify how the load is expected to change.
- 1.4.2 Using the information provided in the Pre-Application Report request form in section 1.4.1, Dakota Electric will identify the substation/area bus, bank or circuit likely to serve the proposed Point of Common Coupling. This selection by Dakota Electric does not necessarily indicate, after application of the screens and/or study, that this would be the circuit the project ultimately connects to. The Interconnection Customer must request additional Pre-Application Reports if information about multiple Points of Common Coupling is requested. Subject to 1.4.3, the Pre-Application Report will include the following information:
  - 1.4.2.1 Total capacity (in megawatts (MW)) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed Point of Common Coupling.
  - 1.4.2.2 Existing aggregate generation capacity (in MW) interconnected to a substation/area bus, bank or circuit (i.e., amount of generation online) likely to serve the proposed Point of Common Coupling.
  - 1.4.2.3 Aggregate queued generation capacity (in MW) for a substation/area bus, bank or circuit (i.e., amount of generation in the queue) likely to serve the proposed Point of Common Coupling.
  - 1.4.2.4 Available capacity (in MW) of substation/area bus or bank and circuit likely to serve the proposed Point of Common Coupling (i.e., total capacity less the sum of existing aggregate generation capacity and aggregate queued generation capacity).
  - 1.4.2.5 Substation nominal distribution voltage and/or transmission nominal voltage if applicable.
  - 1.4.2.6 Nominal distribution circuit voltage at the proposed Point of Common Coupling.
  - 1.4.2.7 Approximate circuit distance between the proposed Point of Common Coupling and the substation.
  - 1.4.2.8 Relevant line section(s) actual or estimated peak load and minimum load data, including daytime minimum load as described in section 3.4.4.1 below and absolute minimum load, when available.

- 1.4.2.9 Whether the Point of Common Coupling is located behind a line voltage regulator.
- 1.4.2.10 Number and rating of protective devices and number and type (standard, bi-directional) of voltage regulating devices between the proposed Point of Common Coupling and the substation/area. Identify whether the substation has a load tap changer.
- 1.4.2.11 Number of phases available on Dakota Electric's medium voltage system at the proposed Point of Common Coupling. If a single phase, distance from the three-phase circuit.
- 1.4.2.12 Limiting conductor ratings from the proposed Point of Common Coupling to the distribution substation.
- 1.4.2.13 Whether the Point of Common Coupling is located on a spot network, grid network, or radial supply.
- 1.4.2.14 Based on the proposed Point of Common Coupling, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.
- 1.4.3 The Pre-Application Report need only include existing data. A request for a Pre-Application Report does not obligate Dakota Electric to conduct a study or other analysis of the proposed DER in the event that data is not readily available. If Dakota Electric cannot complete all or some of a Pre-Application Report due to lack of available data, Dakota Electric shall provide the Interconnection Customer with a Pre-Application Report that includes the data that is available. The confidentiality provisions found in 5.9 apply to Pre-Application Reports.
- 1.4.4 The provision of information on "available capacity" pursuant to section 1.4.2.4 does not imply that an interconnection up to this level may be completed without impacts since there are many variables studied as part of the interconnection review process. The distribution system is dynamic and subject to change, and data provided in the Pre-Application Report may become outdated at the time of the submission of the complete Interconnection Application. Notwithstanding any of the provisions of this section, Dakota Electric shall, in good faith, include data in the Pre-Application Report that represents the best available information at the time of reporting.

### 1.5 <u>Interconnection Application</u>

The Interconnection Customer shall submit an Interconnection Application to Dakota
Electric, together with the processing fee or deposit specified in the Interconnection
Application. Additional fees or deposits for the interconnection process shall not be
required, except as otherwise specified in these procedures. Application form templates are
available in Attachment 2: Simplified Application FormAttachment 1: Pre-Application
Report Request Form

# **Pre-Application Report Request**

Persons interested in finding out the additional information regarding the interconnection of a distributed energy resource to Dakota Electric's distribution system are to fill out this Pre-Application Report Request. The pre-application report request is to be filled out as completely as possible by the applicant. Dakota Electric will provide the applicant with a Pre-Application Report within 15 business days once the completed Pre-Application Report Request and a \$300 fee is submitted to Dakota Electric.

Distributed Energy Resource Information					
Project Address:					
City:			State:	2	Zip Code:
GPS Coordinates:		Nearby Cross Stree	ets:		
Location of the Proposed Point of Commo	on Couplin	ng (e.g. meter numbe	er or pole n	umber):	
DER Type (Check all that apply):					
☐ Solar Photovoltaic	□ Wind	1		Battery Storag	e
☐ Combined Heat and Power	□ Solar Thermal □		Other (please specify)		
Total Aggregate Nameplate Rating of Proj	posed DE	R System (kWAC):			
Phase Configuration of Proposed DER System ☐ Single ☐ Three				☐ Three	
Service Voltage of Proposed DER System				Volts	
Will this be a stand-alone generator not interconnected to onsite load (not including station service)?			□ Yes	□ No	

Please attach copy of site map for proposed project and any additional information that may be helpful in fulfilling the pre-application request. Site map should include true north, proposed project location including general layout, proposed service point location and major roadways.

For Office Use Only			
Date Received:	Application Fee Recei	ived:	Yes □ No
Date Completed Pre-Application Report Sent to Appl	licant:		
Point of Interconnection – Additional Informa	ntion		
Is the proposed interconnection to an existing service to the next section.)	? (If no, applicant is to s	skip 🗆 Y	es □ No
Customer Name:		Customer Acc	count Number:
Existing loads at site (kWAC):			
List future additional loads planned for at site (in kW	AC):		
<b>Project Contact Information</b>			
Full Name:			
Name of Business:			
Street Address:			
City:	Sta	nte:	Zip Code:
Email:	Ph	one:	1

### **Payment and Agreement**

There is a non-refundable \$300 fee for the construction of a pre-application report. By signing this document, I acknowledge and understand that:

- Neither review of this application nor construction of any report shall begin until the full amount of the fee has been paid to Dakota Electric.
- Dakota Electric shall provide a report with only the available information on the proposed point of interconnection.
- The information provided by Dakota Electric may become outdated and not useful at the time of submission of a complete Interconnection Application.
- The confidentiality provision as listed in Section 5.9 of the Minnesota Distributed Energy Resource Interconnection Process MN DIP-DEA apply.

<ul> <li>Upon receipt of the report no guarantee is made.</li> <li>Application will be approved for this proposed.</li> </ul>	de by Dakota Electric that a future Interconnection ed site.
Applicant Signature:	Date:
***Please print clearly or type and return com	npleted along with any additional documentation***

- 1.5.1 Attachment 2 and Attachment 3. Dakota Electric's tariff shall include specific fees for Simplified Process, Fast Track Process, and Study Process consistent with:
  - 1.5.1.1 The processing fee for the Simplified Process Application shall be \$100.
  - 1.5.1.2 For certified, Fast Track Process eligible applications, the processing fee shall be \$100 + \$1/kW. For non-certified Fast Track Process eligible applications, the processing fee shall \$100 + \$2/kW.
  - 1.5.1.3 For an Interconnection Application that is not eligible or does not apply for Simplified Process or Fast Track Process, the processing fee shall be a down payment not to exceed \$1,000 plus \$2.00 per kW toward the deposit required for the study(s) under Section 4 Study Process.
  - 1.5.1.4 Interconnection Applications shall contain a single line diagram and site diagram. A signature from a professional engineer licensed in Minnesota shall be required when: 1) Certified equipment is greater than 250 kW; or 2) non-certified equipment is greater than 50 kW.
- The Interconnection Application shall be date- and time-stamped upon initial and, 1.5.2 if necessary, resubmission receipt. Unless Section 2 Simplified Process applies, the Interconnection Customer shall be notified of receipt by Dakota Electric within three (3) Business Days of receiving the Interconnection Application. Dakota Electric shall notify the Interconnection Customer within ten (10) Business Days of the receipt of the Interconnection Application as to whether the Interconnection Application is complete or incomplete. If the Interconnection Application is incomplete, Dakota Electric shall provide along with the notice that the Interconnection Application is incomplete, a written list detailing all information that must be provided to complete the Interconnection Application. The Interconnection Customer will have ten (10) Business Days after receipt of the notice to submit all of the listed information. If the Interconnection Customer does not provide the listed information within the deadline the Interconnection Application will be deemed withdrawn. An Interconnection Application will be deemed complete upon submission of documents adhering to Minnesota Technical Requirements and containing the listed information to Dakota Electric. Dakota Electric will have five (5) Business Days to review the additional material and notify the Interconnection Customer if the Interconnection Application is deemed complete. The date-and time- stamp of receipt of a complete Interconnection Application shall be accepted as the qualifying date for the purposes of establishing queue position as described in section 1.8.
- 1.6 Modification of the Interconnection Application or a DER Interconnection
  - 1.6.1 At any time after an Interconnection Application is deemed complete, including after the receipt of Fast Track, supplemental review, system impact study, and/or

facilities study results, the Interconnection Customer, Dakota Electric, or the Affected System owner may identify modifications to the planned Interconnection that may improve the costs and benefits (including reliability) of the Interconnection, and/or the ability of Dakota Electric to accommodate the Interconnection. The Interconnection Customer shall submit to Dakota Electric, in writing, all proposed modifications to any information provided in the Interconnection Application. Neither Dakota Electric nor the Affected System operator may unilaterally modify the Interconnection Application.

- 1.6.2 Within ten (10) Business Days of receipt of a proposed modification, Dakota Electric shall evaluate whether a proposed modification to either an Interconnection Application or an existing DER Interconnection constitutes a Material Modification. If applicable, Dakota Electric shall make Reasonable Effort to consult with the Affected System owner. The definition in Error! Reference source not found. Glossary of Terms includes examples of what does and does not constitute a Material Modification.
  - 1.6.2.1 If the proposed modification is determined to be a Material Modification, then Dakota Electric shall notify the Interconnection Customer in writing that the Customer may: 1) withdraw the proposed modification; or 2) proceed with a new Interconnection Application for such modification. The Interconnection Customer shall provide its determination in writing to Dakota Electric within ten (10) Business Days after being provided the Material Modification determination results. If the Interconnection Customer does not provide its determination, the Customer's Application shall be deemed withdrawn.
  - 1.6.2.2 If the proposed modification is determined not to be a Material Modification, then Dakota Electric shall notify the Interconnection Customer in writing that the modification has been accepted and that the Interconnection Customer shall retain its eligibility for interconnection, including its place in the interconnection queue.
- 1.6.3 Any dispute as to Dakota Electric's determination that a modification constitutes a Material Modification shall proceed in accordance with the dispute resolution provisions in section 5.3 of these procedures.
- 1.6.4 Any modification to machine data, equipment configuration or to the interconnection site of the DER not agreed to in writing by Dakota Electric and the Interconnection Customer may be deemed a withdrawal of the Interconnection Application and may require submission of a new Interconnection Application, unless proper notification of each Party by the other as described in sections 1.6.1 and 1.6.2.

#### 1.7 Site Control

Documentation of site control must be submitted with the Interconnection Application. Site control may be demonstrated through providing documentation showing any of the following:

- 1.7.1 Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the DER;
- 1.7.2 An option to purchase or acquire a leasehold site for such purpose; or
- 1.7.3 An exclusivity or other business relationship between the Interconnection Customer and the entity having the right to sell, lease, or grant the Interconnection Customer the right to possess or occupy a site for such purpose; or
- 1.7.4 For DERs utilizing the Section 2 Simplified Process, proof of site control may be demonstrated by the site owner's signature on the Interconnection Application.

#### 1.8 Queue Position

- 1.8.1 Queue Position is assigned by the Area EPS based on when the Interconnection Application is deemed complete as described in section 1.5.2. The Queue Position of each Interconnection Application will be used to determine the cost responsibility for the Upgrades necessary to accommodate the interconnection. The Queue Position also establishes conditional interconnection capacity for an Interconnection Customer, contingent upon all requirements of the MN DIP-DEA and MN Technical Requirements being met.
- 1.8.2 Subject to the provisions in sections 1.5, 1.6, and 1.7, the DER shall retain the Queue Position assigned to their Interconnection Application throughout the review process for the purpose of determining cost responsibility and conditional interconnection capacity, including when moving through the processes covered by Section 2 Simplified Process and Section 3 Fast Track Process. Failure by the Interconnection Customer to meet the time frames outlined in these procedures or request a timeline extension shall result in a withdrawal of the Interconnection Application. The Area EPS shall notify the Interconnection Customer of the missed time frame with an opportunity to request a timeline extension as defined in section 5.2.3 before the Interconnection Application is deemed withdrawn.
- 1.8.3 Dakota Electric shall maintain a single, administrative queue and may manage the queue by geographical region (i.e. feeder, substation, etc.) This administrative queue shall be used to address Interconnection Customer inquiries about the queue process. If Dakota Electric and the Interconnection Customer(s) agree, Interconnection Applications may be studied in clusters for the purpose of the system impact study; otherwise, they will be studied serially.
- 1.8.4 Each Area EPS Operator that has received at least forty (40) complete Interconnection Applications, including Simplified Process Applications, in a year shall maintain a public interconnection queue, available in a sortable spreadsheet

format on its website, which it shall update on at least a monthly basis unless no changes to the spreadsheet have occurred in that month. The date of the most recent update shall be clearly indicated.

1.8.4.1	At a minimum, the following shall be included in the public
	interconnection queue:

1.8.4.1.1	Application or Queue Number
1.8.4.1.2	Date Application Deemed Complete
1.8.4.1.3	Interconnection Process Track (Simplified, Fast Track, or Study Process)
1.8.4.1.4	Proposed DER Capacity (Nameplate Rating unless limited as defined in 5.14.3)
1.8.4.1.5	DER type (technology)
1.8.4.1.6	Proposed DER Location by geographic region (i.e. by feeder or line section)
1.8.4.1.7	Status of the Application's progress through the process (e.g. Initial Review, Supplemental Review, Facilities Study, Construction, Inspection, etc.)

# **Section 2. Simplified Process**

# 2.1 Applicability

2.1.1 For Certified, inverter-based DERs with a DER Capacity of 20 kW ac or less: Dakota Electric shall comport with the Simplified Process, including the time frames described in that process. Simplified Process eligibility does not imply or indicate that a DER will pass the Initial Review Screens, failure to pass the screens will route the application to the Fast Track Process.

<u>Certified Equipment – UL 1741 listing is a common form of DER inverter certification. See</u>

2.1.2 Attachment 4: Certification Codes and Standards and Attachment 5: Certification of Distributed Energy Resource Equipment.

# 2.2 <u>Simplified Process Application Review Process</u>

- 2.2.1 The Interconnection Customer with an eligible DER shall complete the Simplified Process Application and submit it and the application processing fee to Dakota Electric. A Simplified Process Application template is provided in Attachment 2: Simplified Application Form.
- 2.2.2 Within ten (10) Business Days of receipt of the Simplified Process Application, Dakota Electric shall acknowledge to the Interconnection Customer receipt of the Simplified Application, evaluate the Simplified Process Application for completeness, and notify the Interconnection Customer whether the Simplified Process Application is or is not complete, and, if not, identify what material is missing. Dakota Electric shall to the best of its ability identify all missing material and other errors or omissions at this time. The Interconnection Customer shall submit any additional material within five (5) Business Days of Dakota Electric's notice. Dakota Electric shall have an additional five (5) Business Days to review the additional material and notify the Interconnection Customer that the Simplified Process Application is complete.
- 2.2.3 Dakota Electric shall determine if the DER can be interconnected safely and reliably using the Initial Review Screens contained in the Fast Track Process at 3.2.1, and without construction of facilities by Dakota Electric. Dakota Electric has twenty (20) Business Days from receipt of a complete Simplified Process Application to complete this process and inform the Interconnection Customer of the results.

Unless Dakota Electric determines and demonstrates that the DER cannot be interconnected safely and reliably or requires construction of facilities by Dakota Electric, Dakota Electric approves the Application and provides the Interconnection Customer an executable Uniform Statewide Contract or MN DIA-DEA within five (5) days as described in sections 1.1.5.1 and 5.1.1.

If Dakota Electric determines the DER can be connected safely and reliably only with construction of facilities by Dakota Electric, Dakota Electric shall follow the procedures set forth in Section 3.2.2.

If Dakota Electric does not or cannot determine that the DER may be interconnected safely and reliably unless the Interconnection Customer is willing to consider minor modifications or further study, Dakota Electric shall follow the procedures set forth in Section 3.2.3.

# 2.3 <u>Simplified Interconnection</u>

- 2.3.1 the Interconnection Customer shall sign and return the Interconnection Agreement within thirty (30) Business Days<sup>7</sup> or may request an extension as described in Section 5.1.2 and 5.2. The Interconnection Customer must submit to Dakota Electric either 1) a signed copy of the Uniform Statewide Contract, if applicable, which serves as both the power purchase agreement and Interconnection Agreement; or 2) the Interconnection Customer must submit a signed Uniform Statewide Contract, if applicable, and a separate MN DIA-DEA as described in section 1.1.5..
  - 2.3.1.1 Upon receipt of the signed Interconnection Agreement, and then after fully executing it as provided for in Section 5.1.2, Dakota Electric shall schedule and execute appropriate construction of facilities, if necessary, which shall be completed prior to the Interconnection Customer returning the Certificate of Completion. If construction of facilities is required by Dakota Electric, Dakota Electric shall notify the customer upon completion of construction.
- 2.3.2 After installation, the Interconnection Customer returns the Certificate of Completion to Dakota Electric. Prior to parallel operation, and consistent with the MN DIP-DEA, Dakota Electric may inspect the DER for compliance with standards, which may include a witness test, and may schedule appropriate metering replacement, if necessary. Dakota Electric is obligated to complete the witness test, if required, within ten (10) Business Days of the receipt of the Certificate of Completion. If Dakota Electric does not inspect within ten (10) Business Days, the witness test is deemed waived.
- 2.3.3 Within three (3) Business Days of inspection or waiver of inspection, Dakota Electric shall notify the Interconnection Customer in writing that interconnection of the DER has permission to operate. If the witness test is not satisfactory, Dakota Electric has the right to disconnect the DER. The Interconnection Customer has no right to operate in parallel, except for optional testing not to exceed two hours, until permission to operate is granted by Dakota Electric.

#### **Section 3. Fast Track Process**

### 3.1 Applicability

3.1.1 The Fast Track Process is available to an Interconnection Customer proposing to interconnect a DER with Dakota Electric's Distribution System if the DER capacity does not exceed the size limits identified in this Section, including the table below and does not qualify for the Section 2 Simplified Process. Fast Track

<sup>&</sup>lt;sup>7</sup> The 30-day timeframe in this step originates from Section 5.1.2 and does not represent a new step or timeframe.

eligibility does not imply or indicate that a DER will pass the Fast Track Initial Review Screens in 3.2.1 or the Supplemental Review screens in 3.4 below.

Fast Track eligibility for DERs is determined based upon the generator type, the size of the generator, voltage of the line, and the location of and the type of line at the Point of Common Coupling. All synchronous and induction machines must be no larger than 2 MW to be eligible for Fast Track Process consideration. The Fast Track Process size limits are included in the table below.

Fast Track Eligibility for Distributed Energy Resources				
Line Voltage	Fast Track Eligibility <sup>8</sup> Regardless of Location	Fast Track Eligibility for certified, inverter-based DER on a Mainline <sup>9</sup> and ≤ 2.5 Electrical Circuit Miles from Substation <sup>10</sup>		
< 5 kV	≤ 500 kW	≤ 500 kW		
$\geq$ 5 kV and $<$ 15 kV	≤ 1 MW	≤ 2 MW		
$\geq$ 15 kV and $<$ 30 kV	≤ 3 MW	≤ 4 MW		
$\geq$ 30 kV and $\leq$ 69 kV	≤ 4 MW	≤ 5 MW		

<u>In addition to the size threshold, the Interconnection Customer's proposed DER must meet</u>
<u>the codes, standards, and certification requirements of</u>

 $<sup>^{8}</sup>$  Synchronous and induction machines eligibility is limited to no more than 2MW even when line voltage is greater than 15 kV.

<sup>&</sup>lt;sup>9</sup> For purposes of this table, a Mainline is the three-phase backbone of a circuit. It will typically constitute lines with wire sizes of 4/0 American wire gauge, 266 kcmil, 336.4 kcmil, 397.5 kcmil, 477 kcmil and 795 kcmil.

<sup>&</sup>lt;sup>10</sup> An Interconnection Customer can determine this information about its proposed interconnection location in advance by requesting a pre-application report pursuant to section 1.4.

3.1.2 Attachment 4 and Attachment 5 of these procedures, or Dakota Electric has reviewed the design or tested the proposed DER and is satisfied that it is safe to operate.

### 3.2 Initial Review

Within 15 Business Days after Dakota Electric notifies the Interconnection Customer it has received a complete Interconnection Application, Dakota Electric shall perform an initial review using the screens set forth below, notify the Interconnection Customer of the results; including copies of the analysis and data underlying Dakota Electric's determinations under the screens.

The technical screens listed in this section shall not preclude Dakota Electric from seeking approval of tools that perform screening functions using different methodology given that the analysis is aimed at preventing the same voltage, thermal and protection limitations as the initial and supplemental review screens described below.

#### 3.2.1 Initial Review Screens

- 3.2.1.1 The proposed DER's Point of Common Coupling must be on a portion of Dakota Electric's Distribution System.
- 3.2.1.2 For interconnection of a proposed DER to a radial distribution circuit, the aggregated generation, including the proposed DER, on the circuit shall not exceed 15% of the line section annual peak load as most recently measured. A line section is that portion of an Area EPS Operator's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line. Dakota Electric may consider 100% of applicable loading (i.e. daytime minimum load for solar), if available, instead of 15% of line section peak load.
- 3.2.1.3 For interconnection of a proposed DER to the load side of network protectors, the proposed DER must utilize an inverter-based equipment package and, together with the aggregated other inverter-based DERs, shall not exceed the smaller of 5% of a network's maximum load or 50 kW.<sup>1</sup>
- 3.2.1.4 The proposed DER, in aggregation with other DERs on the distribution circuit, shall not contribute more than 10% to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed Point of Common Coupling.
- 3.2.1.5 The proposed DER, in aggregate with other Distributed Energy Resources on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed 87.5% of the short circuit interrupting capability; nor shall the interconnection be proposed for a circuit that already exceeds 87.5% of the short circuit interrupting capability.

<sup>&</sup>lt;sup>1</sup> Network protectors are protective devices used on secondary networks (spot and grid networks) to automatically disconnect its associated transformer when reverse power flow occurs. Secondary networks are most often used in densely populated downtown areas.

3.2.1.6 Using the table below, determine the type of interconnection to a primary distribution line. This screen includes a review of the type of electrical service provided to the Interconnecting Customer, including line configuration and the transformer connection to limit the potential for creating over-voltages on Dakota Electric's electric power system due to a loss of ground during the operating time of any anti-islanding function.

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Result/Criteria
Three-phase, three wire	3-phase or single phase, phase-	Pass screen
	to-phase	
Three-phase, four wire	Effectively-grounded 3 phase or	Pass screen
_	Single-phase, line-to-neutral	

- 3.2.1.7 If the proposed DER is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed DER, shall not exceed 20 kW or 65% of the transformer nameplate rating.
- 3.2.1.8 If the proposed DER is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.
- 3.2.1.9 If the proposed DER is single-phase and is to be interconnected to a three-phase service, its Nameplate Rating shall not exceed 10% of the service transformer nameplate rating.
- 3.2.1.10 If the DER's Point of Common Coupling is behind a line voltage regulator<sup>2</sup>, the DER's Nameplate Rating shall be less than 250 kW.
- 3.2.2 If the proposed interconnection passes the screens, or if the proposed interconnection fails the screens, but Dakota Electric determines that the DER may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the Interconnection Application shall proceed as follows:
  - 3.2.2.1 If the proposed interconnection requires no construction of facilities by Dakota Electric on its own system, Dakota Electric shall provide the Interconnection Customer an executed Interconnection Agreement within five (5) Business Days after the determination.
  - 3.2.2.2 If the proposed interconnection requires construction of any facilities, Dakota Electric shall notify the Interconnection Customer of such requirement when it provides the Initial Review results and copies of the analysis and data underlying Dakota Electric's determinations under the screens and either: 1) provide a good faith cost estimate; or 2) require a facilities study pursuant to 4.4.1. Within five (5) Business Days, the Interconnection Customer shall inform Dakota Electric if the Interconnection Customer elects to proceed with the proposed interconnection. If the Interconnection Customer makes such an

<sup>&</sup>lt;sup>2</sup> This screen does not include substation voltage regulators.

election, Dakota Electric shall either provide: i) an Interconnection Agreement, along with a non-binding good faith cost estimate and construction schedule for such upgrades, within twenty (20) Business Days after Dakota Electric receives such an election or ii) a facilities study agreement pursuant to section 4.4.

3.2.3 If the proposed interconnection fails the screens, and Dakota Electric does not or cannot determine from the Initial Review that the DER may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider minor modifications or further study, Dakota Electric shall provide the Interconnection Customer the opportunity to attend a customer options meeting.

# 3.3 <u>Customer Options Meeting</u>

If Dakota Electric determines the Interconnection Application cannot be approved without either 1) supplemental review, other additional studies or actions; or 2) incurring significant cost to address safety, reliability, or power quality problems, Dakota Electric shall notify the Interconnection Customer of that determination and provide copies of all directly pertinent data and analyses underlying its conclusion, subject to confidentiality provisions in Section 5.9 and where applicable limited by privacy rules. Within ten (10) Business Days of Dakota Electric's determination, unless mutual agreement, Dakota Electric and Interconnection Customer shall schedule a customer options meeting with the Interconnection Customer to review possible facility modifications, screen analysis and related results to determine what further steps are needed to permit the DER to be connected safely and reliably. At the time of notification of Dakota Electric's determination, or at the customer options meeting, Dakota Electric shall:

- 3.3.1 Offer to perform a supplemental review in accordance with section 3.4 and provide a non-binding good faith estimate of the costs of such review; or
- 3.3.2 Obtain the Interconnection Customer's agreement to continue evaluating the Interconnection Application under the Section 4 Study Process.

### 3.4 <u>Supplemental Review</u>

- 3.4.1 To accept the offer of a supplemental review, the Interconnection Customer shall agree in writing and submit a deposit for the estimated costs of the supplemental review in the amount of Dakota Electric's good faith estimate of the costs of such review, both within fifteen (15) Business Days of the offer. If the written agreement and deposit have not been received by Dakota Electric within that timeframe, the Interconnection Application shall continue to be evaluated under the Section 4 Study Process unless it is withdrawn by the Interconnection Customer.
- 3.4.2 The Interconnection Customer may specify with the written agreement and deposit the order in which Dakota Electric will complete the supplemental review screens. The order specified shall be at the level of sections 3.4.4.1, 3.4.4.2, and 3.4.4.3.
- 3.4.3 The Interconnection Customer shall be responsible for Dakota Electric's actual costs for conducting the supplemental review. The Interconnection Customer shall pay any review costs that exceed the deposit within twenty (20) Business Days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, Dakota Electric will return such excess within twenty (20) Business Days of the invoice without interest.
- 3.4.4 Within thirty (30) Business Days following receipt of the deposit for a supplemental review, Dakota Electric shall: 1) perform a supplemental review using the screens set forth below; 2) notify in writing the Interconnection Customer of the results; and 3) include with the notification

copies of the analysis and data underlying Dakota Electric's determinations under the screens. Unless the Interconnection Customer provided instructions for how to respond to the failure of any of the supplemental review screens below at the time the Interconnection Customer accepted the offer of supplemental review, Dakota Electric shall notify the Interconnection Customer following the failure of any of the screens, or if it is unable to perform the screen in this section within two (2) Business Days of making such determination to obtain the Interconnection Customer's permission to: 1) continue evaluating the proposed interconnection under this section 3.4.4; 2) terminate the supplemental review and continue evaluating the DER under Section 4 Study Process; or 3) terminate the supplemental review upon withdrawal of the Interconnection Application by the Interconnection Customer. The Interconnection Customer shall respond with its choice within five (5) Business Days of notification from Dakota Electric.

- 3.4.4.1 Minimum Load Screen: Where 12 months of line section minimum load data (including onsite load but not station service load served by the proposed DER) are available, can be calculated, can be estimated from existing data, or determined from a power flow model, the aggregate DER capacity on the line section is less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed DER. If minimum load data is not available, or cannot be calculated, estimated or determined, Dakota Electric shall include the reason(s) that it is unable to calculate, estimate or determine minimum load in its supplemental review results notification under section 3.4.4.
  - 3.4.4.1.1 The type of generation used by the proposed DER will be taken into account when calculating, estimating, or determining circuit or line section minimum load relevant for the application of screen 3.4.4.1. Solar photovoltaic (PV) generation systems with no battery storage use daytime minimum load (i.e., 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m. for PV\_systems utilizing tracking systems), while all other generation uses absolute minimum load.
  - 3.4.4.1.2 When this screen is being applied to a DER that serves some station service load, only the net injection into Dakota Electric's electric system will be considered as part of the aggregate generation.
  - 3.4.4.1.3 Area EPS Operator will not consider as part of the aggregate generation for purposes of this screen DER capacity known to be already reflected in the minimum load data.
- 3.4.4.2 Voltage and Power Quality Screen: In aggregate with existing generation on the line section: (1) the voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions; (2) the voltage fluctuation is within acceptable limits as defined by Institute of Electrical and Electronics Engineers (IEEE) Standard 1453, or utility practice similar to IEEE Standard 1453; and (3) the harmonic levels meet IEEE Standard 519 limits.
- 3.4.4.3 Safety and Reliability Screen: The location of the proposed DER and the aggregate generation capacity on the line section do not create impacts to safety or reliability that cannot be adequately addressed without application of the Study Process. Dakota Electric shall give due consideration to the following and

other factors in determining potential impacts to safety and reliability in applying this screen.

- 3.4.4.3.1 Whether the line section has significant minimum loading levels dominated by a small number of customers (e.g., several large commercial customers).
- 3.4.4.3.2 Whether the loading along the line section is uniform or even.
- 3.4.4.3.3 Whether the proposed DER is located in close proximity to the substation (i.e., less than 2.5 electrical circuit miles), and whether the line section from the substation to the Point of Common Coupling is a Main line rated for normal and emergency ampacity.
- 3.4.4.3.4 Whether the proposed DER incorporates a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time.
- 3.4.4.3.5 Whether operational flexibility is reduced by the proposed DER, such that transfer of the line section(s) of the DER to a neighboring distribution circuit/substation may trigger overloads or voltage issues.
- 3.4.4.3.6 Whether the proposed DER employs equipment or systems certified by a recognized standards organization to address technical issues such as, but not limited to, islanding, reverse power flow, or voltage quality.
- 3.4.5 If the proposed interconnection passes the supplemental screens in sections 3.4.4.1, 3.4.4.2, and 3.4.4.3 above, or if the proposed interconnection fails the screens, but Dakota Electric determines that the DER may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the interconnection shall proceed as follows:
  - 3.4.5.1 If the proposed interconnection passes the supplemental screens in sections 3.4.4.1, 3.4.4.2, and 3.4.4.3 above and does not require construction of facilities by Dakota Electric on its own system, Dakota Electric shall provide the Interconnection Customer an executable Interconnection Agreement within five (5) Business Days.
  - 3.4.5.2 If the proposed interconnection requires construction of any Area EPS facilities, Dakota Electric shall notify the Interconnection Customer of such requirement when it provides the supplemental review results and either: 1) provide a good faith cost estimate; or 2) require a facilities study pursuant to 4.4.1. Within five (5) Business Days, the Interconnection Customer shall inform Dakota Electric if the Interconnection Customer elects to proceed with the proposed interconnection. If the Interconnection Customer makes such an election, Dakota Electric shall either provide: i) an Interconnection Agreement, along with a non-binding good faith cost estimate and construction schedule for such upgrades, within twenty (20) Business Days after Dakota Electric receives such an election or ii) a facilities study agreement pursuant to section 4.4.

3.4.6 If the proposed interconnection fails the screens, and Dakota Electric does not or cannot determine that the DER may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider minor modifications or further study, Dakota Electric shall provide the Interconnection Customer the option of commencing the Section 4 Study Process. If the Interconnection Customer wishes to proceed it shall notify Dakota Electric within fifteen (15) Business Days to retain its queue position.

#### **Section 4. Study Process**

# 4.1 Applicability

The Study Process shall be used by an Interconnection Customer proposing to interconnect its DER with Dakota Electric's Distribution System if the DER 1) is not eligible for Section 2 Simplified Process review or Section 3 Fast Track Process review, or 2) did not pass the Fast Track Process or the Simplified Process. The application fee described in section 1.5.1.3 shall be applied to the application completeness review costs and the first deposit required in this section.

### 4.2 <u>Scoping Meeting</u>

- 4.2.1 A scoping meeting shall be held within ten (10) Business Days after the Interconnection Application is deemed complete or, if applicable, the Fast Track Process or Simplified Process has been completed and the Interconnection Customer has elected to continue with the Study Process, or as mutually agreed to by the Parties. Dakota Electric and the Interconnection Customer will bring to the meeting personnel, including system engineers and other resources, as may be reasonably required to accomplish the purpose of the meeting.
- 4.2.2 The purpose of the scoping meeting is to discuss the Interconnection Application and review existing study results and relevant underlying data and assumptions relevant to the Interconnection Application. The Parties shall further discuss whether Dakota Electric should perform a system impact study or studies, or proceed directly to a facilities study or an Interconnection Agreement. If Dakota Electric determines there is no potential for Transmission System or Distribution System adverse system impacts, the Interconnection Application shall proceed directly to a facilities study or an executable Interconnection Agreement, as agreed to by the Parties.
- 4.2.3 The scoping meeting may be omitted by mutual agreement.

# 4.3 System Impact Study

- 4.3.1 A system impact study shall identify and detail the electric system impacts that would result if the proposed DER(s) were interconnected without project modifications or electric system modifications, and to study potential impacts, including but not limited to those identified in the scoping meeting. A system impact study shall evaluate the impact of the proposed interconnection on the reliability of the electric system.
- 4.3.2 If the Parties agree at the scoping meeting that a system impact study should be performed, Dakota Electric shall provide the Interconnection Customer, as soon as possible, but not later than five (5) Business Days after the scoping meeting, a system impact study agreement as defined in 4.3.3.

If the scoping meeting is omitted by mutual agreement or, if applicable, the Simplified Process or Fast Track Process has been completed and the Interconnection Customer has elected to continue with the Study Process, and a system impact study is required, Dakota Electric shall provide the Interconnection Customer a system impact study agreement within ten (10) Business Days.

- 4.3.3 The system impact study agreement (Attachment 6) shall include an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study. If applicable, the agreement shall list any additional and reasonable technical data on the DER needed to perform the system impact study. The scope of and cost responsibilities for a system impact study are described in the attached system impact study agreement. A deposit of the good faith estimated costs for each system impact study shall be provided by the Interconnection Customer when it returns the study agreements. The additional and reasonable technical data, if applicable, shall be returned with the system impact agreement. Upon Interconnection Customer request, Dakota Electric shall grant a time frame extension as described in 5.2.3 if additional technical data is requested.
- 4.3.4 In order to remain in consideration for interconnection, an Interconnection Customer who has requested a System Impact Study must return the executed system impact study agreement and pay the required study deposit within twenty (20) Business Days.
- 4.3.5 A System Impact Study shall be completed within thirty (30) Business Days after the system impact study agreement is signed by the Parties and delivered with deposit to Dakota Electric. The results and, if necessary, facilities study agreement shall be delivered to the Interconnection Customer within five (5) Business Days of completion of the System Impact Study. Upon request, Dakota Electric shall provide Interconnection Customer supporting documentation and workpapers developed in the preparation of the system impact study, subject to confidentiality arrangements consistent with these procedures and the System Impact Study agreement.
- 4.3.6 In instances where it is known by Dakota Electric, before the System Impact Study agreement is executed or during the process of completing the System Impact Study the potential for Transmission System adverse system impacts is identified, within five (5) Business Days following the identification of such impacts by Dakota Electric, Dakota Electric shall coordinate with the appropriate Transmission Provider to have the necessary studies completed to determine if the DER causes any adverse transmission impacts. Dakota Electric will coordinate with the Transmission Provider to the Interconnection Customer a transmission system impact study agreement with the Transmission Provider.
- 4.3.7 In order to remain in consideration for interconnection, an Interconnection Customer must return the executed Transmission System impact study agreement within fifteen (15) Business Days.
- 4.3.8 A Transmission System impact study, if required, shall be completed and the results transmitted to the Interconnection Customer in as timely a manner as possible after the transmission system impact study agreement is signed by the Parties. Dakota Electric shall be responsible for coordination with the Transmission Provider as needed. Affected Systems shall participate in the study and provide all information necessary to prepare the study.

### 4.4 Facilities Study

4.4.1 If construction of facilities is required, a facilities study may be necessary to specify and estimate the cost of the equipment, engineering, procurement and construction work identified in Initial Review, Supplemental Review, or the Study Process to provide interconnection and interoperability of the DER with Dakota Electric's Distribution System as required by Minnesota Technical Requirements. Interconnection Applications reviewed in the Simplified Process and Fast Track Process that require construction of facilities may be eligible, upon determination of Dakota Electric, to forego a facilities study as described in section 3.2.2.2.

Dakota Electric shall provide the Interconnection Customer a distribution facilities study agreement in tandem with the results of the Interconnection Customer's system impact study If required, Dakota Electric will coordinate with the local transmission supplier to provide a Transmission Facilities Study agreement for the Interconnection Customer.

If no system impact study is required, but a distribution facilities study is required, then Dakota Electric shall provide as soon as possible, but not later than five (5) Business Days after the scoping meeting, a distribution facilities study agreement.

If the scoping meeting is omitted by mutual agreement and no system impact study is required, but a facilities study is required, Dakota Electric shall provide the Interconnection Customer a distribution facilities study agreement within ten (10) Business Days after the Interconnection Application is deemed complete and, if applicable, the Simplified Process or Fast Track Process has been completed.

- 4.4.2 The distribution facilities study agreement (Attachment 7) shall be accompanied by an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the facilities study. The scope of and cost responsibilities for the facilities study are described in the attached facilities study agreement. A deposit of the good faith estimated costs for the facilities study shall be provided by the Interconnection Customer at the time it returns the study agreement.
- 4.4.3 In order to remain under consideration for interconnection, the Interconnection Customer must return the executed distribution facilities study agreement and pay the required study deposit within fifteen (15) Business Days.
- 4.4.4 The distribution facilities study shall specify and estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the system impact study(s).
- 4.4.5 Design for any required Interconnection Facilities and/or Upgrades shall be performed under the distribution Facilities Study Agreement unless the Interconnection Application is processed under the provisions of section 3.2.2.2. However, in the event that the Interconnection Customer did not provide to Dakota Electric all required Conditional Use Permits at the time of entering into the distribution Facilities Study Agreement, any such Design and/or Upgrades by Dakota Electric may be delayed until after the Interconnection Customer has provided to Dakota Electric all required Conditional Use Permits or provided a final design. The information in the Conditional Use Permits, or changes to the design, may result in significant modifications to the planned design and/or Upgrades. The Interconnection Customer may send to Dakota Electric a redacted version of the Conditional Use Permit to ensure confidentiality, but any and all information that Dakota Electric would reasonably need to perform an accurate distribution Facilities Study shall not be redacted. If necessary to comply with these requirements, a confidential version of the Conditional Use Permit may be provided to Dakota Electric, with the confidential information being clearly marked and subject to the Confidentiality provisions in 5.9. Dakota Electric may contract with consultants to perform activities required under the facilities study agreement. The Interconnection Customer and Dakota Electric may agree to allow the Interconnection Customer to separately arrange for the design of some of the Interconnection Facilities. In such cases, facilities design will be reviewed and/or modified prior to acceptance by Dakota Electric, under the provisions of the distribution Facilities Study Agreement. If the Parties agree to separately arrange for design and construction, and provided security and confidentiality requirements can be met, Dakota Electric shall make sufficient information available to the Interconnection Customer in accordance with

- confidentiality and critical infrastructure requirements to permit the Interconnection Customer to obtain an independent design and cost estimate for any necessary facilities.
- 4.4.6 In cases where Upgrades are required, the distribution facilities study must be completed within forty-five (45) Business Days of the receipt of the executed facilities study agreement and deposit.
- 4.4.7 In cases where no Upgrades are necessary, and the required facilities are limited to Interconnection Facilities, the distribution facilities study must be completed within thirty (30) Business Days of the receipt of the executed facilities study agreement and deposit.
- 4.4.8 Once the distribution facilities study is completed, a draft facilities study report shall be prepared and transmitted to the Interconnection Customer. Upon request, Dakota Electric shall provide Interconnection Customer supporting documentation and workpapers developed in the preparation of the distribution Interconnection Facilities Study, subject to confidentiality arrangements consistent with these procedures and the facilities study agreement.
- 4.4.9 Within ten (10) Business Days of providing a draft facilities study report to Interconnection Customer, Dakota Electric and Interconnection Customer shall meet to discuss the results of the distribution facilities study unless the meeting is omitted by mutual agreement.
- 4.4.10 Interconnection Customer may, within twenty (20) Business Days after receipt of the draft report, provide written comments to Dakota Electric, which Dakota Electric shall address in the final report.
- 4.4.11 Dakota Electric shall issue the final distribution facilities study report within fifteen (15) Business Days of receiving Interconnection Customer's comments or promptly upon receiving Interconnection Customer's statement that it will not provide comments. Dakota Electric may reasonably extend the time frame upon notice to the Interconnection Customer if the Interconnection Customer's comments require additional analyses or lead to significant modifications by Dakota Electric prior to issuance of the final distribution facilities study report.

### **Section 5. Provisions that Apply to All Interconnection Applications**

#### 5.1 Interconnection Agreement

- 5.1.1 Dakota Electric shall provide the Interconnection Customer an executable Interconnection Agreement as described in section 1.1.5 within five (5) Business Days after the completion of all required review or study of the Interconnection Application unless sections 3.2.2.2, 3.4.5.1, 3.4.5.2 or 4.2.2 applies.
- 5.1.2 After receiving an Interconnection Agreement from Dakota Electric, the Interconnection Customer shall have thirty (30) Business Days to sign and return the interconnection agreement. If the Interconnection Customer does not sign the interconnection agreement, request an extension pursuant to these procedures, or ask Dakota Electric to file an unexecuted Interconnection Agreement with the Commission within thirty (30) Business Days, the Interconnection Application shall be deemed withdrawn. Dakota Electric shall provide the Interconnection Customer a fully executed Interconnection Agreement within five (5) Business Days after receiving a signed interconnection agreement from the Interconnection Customer. After the Interconnection Agreement is signed by the Parties, the interconnection of the DER shall proceed under the provisions of the Interconnection Agreement, except to the extent these procedures remain applicable, including, but not limited to, sections 5.5, 5.6, and 5.7.

5.1.3 After completion of the installation, the Interconnection Customer returns the Certificate of Completion to Dakota Electric. Prior to parallel operation, and consistent with the MN DIP-DEA, Dakota Electric may inspect the DER for compliance with standards, which may include a witness test, and may schedule appropriate metering replacement, if necessary. For qualified systems 40kW or smaller, Dakota Electric is obligated to complete the witness test, if required, within ten (10) Business Days of the receipt of the Certificate of Completion. For these systems, if Dakota Electric does not inspect within ten (10) Business Days, the witness test is deemed waived. Error! Reference source not found. For systems larger than 40kW, Dakota Electric shall coordinate with the installer to complete inspection and/or testing in a reasonable time frame. The installer shall coordinate with Dakota Electric in support this inspection and testing.

### 5.2 Time Frames and Extensions

- 5.2.1 Response or Action Timeframes: Unless otherwise stated, all time frames are measured in Business Days. For purposes of measuring these time intervals and consistent with Minn. Stat. §645.15, the time shall be computed so as to exclude the first and include the last day of the prescribed or fixed period or duration of time. Any communication sent or received after 4:30 p.m. (local time in Saint Paul, Minnesota) or on a Saturday, Sunday, or Holiday shall be considered to have been sent on the next Business Day.
- 5.2.2 Dakota Electric shall make Reasonable Efforts to meet all time frames provided in these procedures. If Dakota Electric cannot meet a deadline provided herein, it must notify the Interconnection Customer in writing within three (3) Business Days after the deadline to explain the reason for the failure to meet the deadline, and provide an estimated time by which it will complete the applicable interconnection procedure in the process.
- 5.2.3 For applicable time frames described in these procedures, the Interconnection Customer may request in writing one extension equivalent to half of the time originally allotted (e.g., ten (10) Business Days for a twenty (20) Business Days original time frame) which Dakota Electric may not unreasonably refuse. No further extensions for the applicable time frame shall be granted absent a Force Majeure Event or other similarly extraordinary circumstances.

#### 5.3 Disputes

- 5.3.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process and associated study and Interconnection Agreements according to the provisions of this article and Minnesota Administrative Rules 7829.1500-7829.1900. More information on the Commission's Consumer Affairs Office dispute resolution services is available on the Commission's website: <a href="https://mn.gov/puc/consumers/help/complaint/">https://mn.gov/puc/consumers/help/complaint/</a>
- 5.3.2 Prior to a written Notice of Dispute, the Party shall contact the other Party and raise the issue and the relief sought in an attempt to resolve the issue immediately.
- 5.3.3 In the event of a dispute, the disputing Party shall provide the other Party a written Notice of Dispute containing the relevant known facts pertaining to the dispute, the specific dispute and the relief sought, and express notice by the disputing Party that it is invoking the procedures under this article. The Interconnection Customer may utilize the Commission's Consumer Affairs Office's complaint/inquiry form and Informal Complaint dispute resolution process to assist with the written Notice of Dispute. The notice shall be sent to the non-disputing Party's email address and physical address set forth in the Interconnection Agreement or Interconnection Application, if there is no Interconnection Agreement. If the Interconnection Customer chooses not to utilize the Commission's Consumer Affair Office dispute resolution process, the Interconnection Customer

shall provide an informational electronic copy of the Notice of Dispute to the Consumer Affairs Office at the Commission at consumer.puc@state.mn.us.

- 5.3.4 The non-disputing Party shall acknowledge the notice within three (3) Business Days of its receipt and identify a representative with the authority to make decisions for the non-disputing Party with respect to the dispute.
- 5.3.5 The non-disputing Party shall provide the disputing Party with relevant regulatory and/or technical details and analysis regarding Dakota Electric interconnection requirements under dispute within ten (10) Business Days of the date of the Notice of Dispute. Within twenty (20) Business Days of the date of the Notice of Dispute, the Parties' authorized representatives will be required to meet and confer to try to resolve the dispute. Parties shall operate in good faith and use best efforts to resolve the dispute.
- 5.3.6 If a resolution is not reached in the thirty (30) Business Days from the date of the notice described in section 5.3.3, the Parties may 1) if mutually agreed, continue negotiations for up to an additional twenty (20) Business Days; or 2) either Party may request the Commission's Consumer Affairs Office provide mediation in an attempt to resolve the dispute within twenty (20) Business Days with the opportunity to extend this timeline upon mutual agreement. Alternatively, both Parties by mutual agreement may request mediation from an outside third-party mediator with costs to be shared equally between the Parties.
- 5.3.7 If the results of the mediation are not accepted by one or more Parties and there is still disagreement, the dispute shall proceed to the Commission's Formal Complaint process as described in Minn. Rules 7829.1700-1900 unless mutually agreed to continue with informal dispute resolution.
- 5.3.8 At any time, either Party may file a complaint before the Commission pursuant to Minn. Stat. §216B.164, if applicable, and Commission rules outlined in Minn. Rules Ch. 7829.

#### 5.4 Interconnection Metering

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

- 5.4.1 Pay upfront the cost of metering requirements for the DER. Any maintenance or replacement costs may be billed separately to the Interconnection Customer after these costs are incurred.
- 5.4.2 Pay a tariffed monthly charge for the actual, DER-related meter and metering-related costs. If no tariffed monthly charge is an exact match, then the closest applicable tariffed monthly charge shall apply; unless metering requirements are so different that individual case basis pricing should apply.

#### 5.5 Non-Warranty

Dakota Electric 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, operated, installed or

maintained by the Interconnection Customer, including without limitation the DER and any structures, equipment, wires, appliances or devices not owned, operated or maintained by Dakota Electric.

- 5.6 Design, Procurement, Installation and Construction of Interconnection Facilities and Upgrades
  - 5.6.1 The Interconnection Customer shall pay for the actual cost of the Interconnection Facilities and Distribution Upgrades as described and itemized pursuant to the Interconnection Agreement and its attachments. If Network Upgrades are required, the actual cost of the Network Upgrades, including overheads, shall be borne by the Interconnection Customer pursuant to the Transmission Provider and associated agreement(s). As indicated in the Interconnection Agreement, Dakota Electric shall provide a good faith cost estimate, including overheads, for the purchase and construction of the Interconnection Facilities, and Distribution Upgrades, and provide a detailed itemization of such costs.
  - 5.6.2 The Interconnection Customer and Dakota Electric shall agree on milestones for which each Party is responsible and list them in an attachment to the Interconnection Agreement. To the greatest extent possible, the Parties will identify all design, procurement, installation and construction requirements associated with a project, and clear associated timelines, at the beginning of the design, procurement, installation and construction phase, or as early within the process as possible.
  - 5.6.3 A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it shall immediately notify the other Party of the reason(s) for not meeting the milestone and 1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and 2) request appropriate amendments to the Interconnection Agreement and its attachments. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless 1) it will suffer significant uncompensated economic or operational harm from the delay, 2) attainment of the same milestone has previously been delayed, or 3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment. If the Party affected by the failure to meet a milestone disputes the proposed extension, the affected Party may pursue dispute resolution pursuant to 5.3.
  - 5.6.4 At the option of Dakota Electric, either the "Traditional Security" or the "Modified Security" method shall be used.
    - 5.6.4.1 Under the Traditional Security method, the Interconnection Customer shall provide reasonable adequate assurances of credit, including a letter of credit or personal guaranty of payment and performance from a creditworthy entity acceptable under Dakota Electric credit policy and procedures for the unpaid balance of the estimated amount shown in Interconnection Agreement for the totality of all anticipated work or expense incurred by Dakota Electric associated with the Interconnection Application. The payment for these estimated costs shall be as follows:
      - 5.6.4.1.1 1/3 of estimated costs shall be due no later than when the Interconnection Customer signs the Interconnection Agreement.
      - 5.6.4.1.2 An additional 1/3 of estimated costs shall be due prior to initial energization of the Generation System with Dakota Electric.

- 5.6.4.1.3 Remainder of actual costs, incurred by Area EPS Operator, shall be due within 30 days from the date the bill is mailed by Dakota Electric after project completion.
- Under the Modified Security method, at least twenty (20) Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of Dakota Electric's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide Dakota Electric, at the Interconnection Customer's option, a guarantee, letter of credit or other form of security that is reasonably acceptable to Dakota Electric 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 Dakota Electric's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to Dakota Electric under the Interconnection Agreement during its term.
- The guarantee must be made by an entity that meets the creditworthiness requirements of Dakota Electric, 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.
- The letter of credit must be issued by a financial institution or insurer reasonably acceptable to Dakota Electric and must specify a reasonable expiration date not sooner than sixty (60) Business Days (three calendar months) after the due date of the final accounting report and bill described in 5.6.6.
- 5.6.5 Dakota Electric shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades described in the Interconnection Agreement on a monthly basis, or as otherwise agreed by the Parties in the interconnection agreement. The Interconnection Customer shall pay each bill within twenty-one (21) Business Days of receipt, or as otherwise agreed to by the Parties in the interconnection agreement.
- 5.6.6 Within eighty (80) Business Days (approximately four (4) calendar months) of completing the construction and installation of Dakota Electric's Interconnection Facilities and/or Upgrades described in the interconnection agreement and its attachments, Dakota Electric shall provide the Interconnection Customer with a final accounting report of any difference between 1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and 2) the Interconnection Customer's previous aggregate payments to Dakota Electric for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, Dakota Electric shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to Dakota Electric within twenty (20) Business Days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under the Interconnection Agreement, Dakota Electric shall refund to the Interconnection Customer an amount equal to the difference within twenty (20) Business Days of the final accounting report.

#### 5.7 Inspection, Testing, Commissioning and Authorization

5.7.1 The Interconnection Customer shall arrange for the inspection and testing of the DER and the Customer's Interconnection Facilities prior to interconnection pursuant to Minnesota

Interconnection Technical Requirements. Commissioning tests of the Interconnection Customer's installed equipment shall be performed pursuant to applicable codes and standards pursuant to Minnesota Technical Requirements.

- 5.7.2 The Interconnection Customer shall notify Dakota Electric of testing and inspection no fewer than five (5) Business Days in advance, or as may be agreed to by the Parties. Testing and inspection shall occur on a Business Day. Dakota Electric may, at its own expense if not required in Minnesota Interconnection Technical Requirements, send qualified personnel to the DER site to inspect the interconnection and witness the testing. The Interconnection Customer shall provide Dakota Electric a written results report.
- 5.7.3 Dakota Electric shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by Dakota Electric of the safety, durability, suitability, or reliability of the DER or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the DER.

### 5.8 Authorization Required Prior to Parallel Operation

- 5.8.1 Area EPS Operator shall use Reasonable Efforts to list applicable parallel operation requirements by attaching the Minnesota Interconnection Technical Requirements to the Interconnection Agreement. Additionally, Dakota Electric shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. Dakota Electric shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.
- 5.8.2 The Interconnection Customer shall not operate its DER in parallel with Dakota Electric's Distribution System without prior written permission to operate authorization from Dakota Electric. Dakota Electric shall provide such authorization within three (3) Business Days from when Dakota Electric receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements and all payments for issued bills under the Interconnection Agreement, System Impact Study Agreement, Facilities Study Agreement or Section 5.6.5 above that are past due have been paid in full. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

# 5.9 <u>Confidentiality</u>

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

notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be publicly divulged in an action to enforce these procedures. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under these procedures, or to fulfill legal or regulatory requirements that could not otherwise be fulfilled by not making the information public.

- 5.9.2.1 Each Party shall hold in confidence and shall not disclose Confidential Information, to any person (except employees, officers, representatives and agents, who agree to be bound by this section). Confidential Information shall be clearly marked as such on each page or otherwise affirmatively identified. If a court, government agency or entity with the right, power, and authority to do so, requests or requires either Party, by subpoena, oral disposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party with prompt notice of such request(s) or requirements(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of this Agreement. In the absence of a protective order or waiver the Party shall disclose such confidential information which, in the opinion of its counsel, the party is legally compelled to disclose. Each Party will use reasonable efforts to obtain reliable assurance that confidential treatment will be accorded any confidential information so furnished.
- 5.9.2.2 Critical infrastructure information or information that is deemed or otherwise designated by a Party as Critical Energy/Electric Infrastructure Information (CEII) pursuant to FERC regulation, 18 C.F.R. §388.133, as may be amended from time to time, may be subject to further protections for disclosure as required by FERC or FERC regulations or orders and the disclosing Party's CEII policies.
- Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.
- Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

### 5.10 <u>Insurance</u>

5.10.1 At a minimum, the Interconnection Customer shall maintain, during the term of the Interconnection Agreement, general liability insurance, from a qualified insurance agency with a B+ or better rating by "Best" and with a combined single limit of not less than the limits described in the chart below.

Distributed Energy Resource System Size	Liability Insurance Requirement
≤ 40 kWac	\$300,000
> 40 kWac and ≤ 250 kWac	\$1,000,000
> 250 kWac and \le 5 MWac	\$2,000,000
> 5 MWac and ≤ 10 MWac	\$3,000,000

Such general liability insurance shall include coverage against claims for damages resulting from (i) bodily injury, including wrongful death; and (ii) property damage arising out of the Interconnection Customer's ownership and/or operation of the DER under this agreement

- 5.10.2 The general liability insurance required shall, by endorsement to the policy or policies, (a) include Dakota Electric as an additional insured; (b) contain a severability of interest clause or crossliability clause; (c) provide that Dakota Electric shall not by reason of its inclusion as an additional insured incur liability to the insurance carrier for the payment of premium for such insurance; and (d) provide for twenty (20) business days' written notice to Dakota Electric prior to cancellation, termination, alteration or material change of such insurance.
- 5.10.3 If the DER is connected to an account receiving residential service from Dakota Electric and its system size is less than 40kW, then the endorsements required in Section 5.10.2 shall not apply.
- 5.10.4 The Interconnection Customer shall furnish the required insurance certificates and endorsements to Dakota Electric prior to the initial operation of the DER. Thereafter, Dakota Electric shall have the right to periodically inspect or obtain a copy of the original policy or policies of insurance.
- 5.10.5 Evidence of the insurance required in Section 5.10.1 shall state that coverage provided is primary and is not excess to or contributing with any insurance or self-insurance maintained by Dakota Electric.
- 5.10.6 If the Interconnection Customer is self-insured with an established record of self-insurance, the Interconnection Customer may comply with the following in lieu of Sections 5.10.1 5.10.5.
  - 5.10.6.1 Interconnection Customer shall provide Dakota Electric, at least twenty (20) days prior to the date of initial operation, evidence of an acceptable plan to self-insure to a level of coverage equivalent to that required under Section 5.10.1.
  - 5.10.6.2 If the Interconnection Customer ceases to self-insure to the level required hereunder, or if the Interconnection Customer is unable to provide continuing evidence of the ability to self-insure, the Interconnection Customer agrees to immediately obtain the coverage required under Section 5.10.1.
  - 5.10.6.3 Failure of the Interconnection Customer or Dakota Electric 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.

5.10.7 An Interconnection Customer's insurance requirements shall be limited to no more than an aggregate cap of \$35 million if the Interconnection Customer has multiple DER systems in Dakota Electric's service territory.

## 5.11 <u>Comparability</u>

Dakota Electric shall receive, process and analyze all Interconnection Applications in a timely manner as set forth in this document. Dakota Electric shall use the same Reasonable Efforts in processing and analyzing Interconnection Applications from all Interconnection Customers, whether the DER is owned or operated by Dakota Electric, its subsidiaries or affiliates, or others.

#### 5.12 Record Retention

Dakota Electric shall maintain for three years records, subject to audit, of all Interconnection Applications received under these procedures, the times required to complete Interconnection Application approvals and disapprovals, and justification for the actions taken on the Interconnection Applications.

### 5.13 Coordination with Affected Systems

Dakota Electric shall coordinate the conduct of any studies required to determine the impact of the Interconnection Application on Affected Systems with Affected System operators and, if possible, include those results (if available) in its applicable interconnection study within the time frame specified in these procedures. Dakota Electric will make Reasonable Effort to include the Affected System operator(s) in all relevant meetings held with the Interconnection Customer as required by these procedures. The Interconnection Customer will cooperate with Dakota Electric and the Affected System operator(s) in all matters related to the conduct of studies and the determination of modifications to Affected Systems. Affected System operators shall cooperate with Dakota Electric and Interconnection Customer(s) with whom interconnection has been requested in all matters related to the conduct of studies and the determination of modifications to Affected Systems.

## 5.14 Capacity of the Distributed Energy Resource

- 5.14.1 If the Interconnection Application is for an increase in capacity for an existing DER, the Interconnection Application shall be evaluated on the basis of the new total alternating current ("AC") capacity of the Distributed Energy Resource. The maximum capacity of a Distributed Energy Resource shall be the Aggregate Nameplate Rating or may be limited as described in 5.14.3.
- 5.14.2 An Interconnection Application for a DER that includes a single or multiple energy production devices at a site for which the Interconnection Customer seeks a single Point of Common Coupling shall be evaluated on the basis of the Aggregate Nameplate Rating of the multiple DERs unless 5.14.3 applies.
- 5.14.3 If the maximum capacity of the DER(s) is limited (e.g., through use of a control system, power relay(s), or other similar device settings or adjustments), then the Interconnection Customer must obtain Dakota Electric's agreement that the manner in which the Interconnection Customer proposes to implement such a limit will effectively limit active power output so as to not adversely affect the safety and reliability of Dakota Electric's system. Such agreement shall not to be unreasonably withheld. If Dakota Electric does not so agree, then the Interconnection Application must be withdrawn or revised. Nothing in this section shall prevent an Area EPS Operator from considering an output higher than the limited output (e.g. Aggregate Nameplate Rating), if the

limitations do not provide adequate assurance, when evaluating system impacts. Technical Requirements for more detail.	See Minnesota
Dakota Electric's MN Distributed Energy Resource Interconnection Process (MN DIP-DEA)	- 18 -

### **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.

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

Certified Equipment - UL 1741 listing is a common form of DER inverter certification. See

Attachment 4: Certification Codes and Standards and Attachment 5: Certification of Distributed Energy Resource Equipment

#### Confidential Information – See MN DIP-DEA 5.9

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

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

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

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

**Fast Track Process** – The procedure as described in Section 3 for evaluating an Interconnection Application for a DER that meets the eligibility requirements of section 3.1.

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

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

**Governmental Authority** – Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over

the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Area EPS Operator, or any Affiliate thereof. The Minnesota Public Utilities Commission is the authority governing interconnection requirements unless otherwise provided for in the Minnesota Technical Requirements.

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

**Interconnection Application** – The Interconnection Customer's request to interconnect a new or modified, as described in MN DIP-DEA Section 1.6, DER. See Attachment 2: Simplified Application Form and Attachment 3 Interconnection Application Form.

**Interconnection Customer** – The person or entity, including the Area EPS Operator, whom will be the owner of the DER that proposes to interconnect a DER(s) with the Area EPS Operator's Distribution System. The Interconnection Customer is responsible for ensuring the 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.

**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.<sup>13</sup>

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<sup>&</sup>lt;sup>13</sup> 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),

**MN DIA-DEA -** The Dakota Electric Association version of the Minnesota Distributed Energy Resource Interconnection Agreement. See MN DIP-DEA Section 1.1.5 for when the Uniform Statewide Contract or MN DIA-DEA applies.

**MN DIP-DEA** – The Dakota Electric Association version of the Minnesota Distributed Energy Resource Interconnection Process. Statewide interconnection standards in this document.

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

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

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

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

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.

**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 MN DIA-DEA.

**Party or Parties** – Dakota Electric 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.

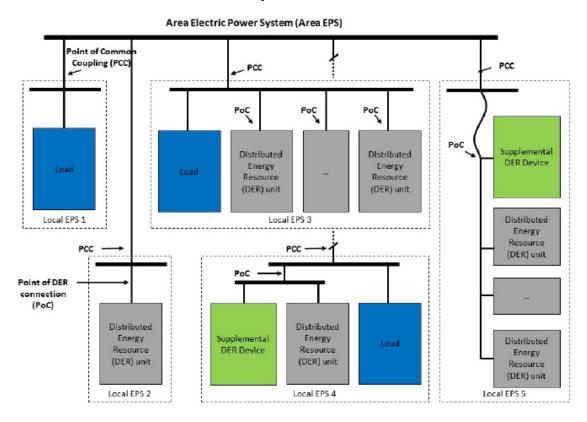


Figure 1: Point of Common Coupling and Point of DER Connection

(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 sections 1.5.2 and 1.8.

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

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

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

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

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

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

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

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

**Uniform Statewide Contract** – State of Minnesota's standard, uniform contract that must be applied to all qualifying new and existing interconnections between a utility and DER having

capacity less than 40 kilowatts if interconnecting with a cooperative or municipal utility, and 1,000 kilowatts if interconnecting with a public utility. (Minn. Rules 7835.9910)

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

## **Attachment 1: Pre-Application Report Request Form**

# **Pre-Application Report Request**

Persons interested in finding out the additional information regarding the interconnection of a distributed energy resource to Dakota Electric's distribution system are to fill out this Pre-Application Report Request. The pre-application report request is to be filled out as completely as possible by the applicant. Dakota Electric will provide the applicant with a Pre-Application Report within 15 business days once the completed Pre-Application Report Request and a \$300 fee is submitted to Dakota Electric.

Distributed Energy Resource Information						
Project Address:						
		1				
City:		State:		Zip Code:		
GPS Coordinates:	Nearby C	cross Streets:				
Location of the Proposed Point of Com	mon Counling (o.g. mo	tar numbar ar nala n	umbor):			
Location of the Proposed Point of Com	mon Coupling (e.g. me	ter number or pole in	umber):			
DER Type ( <i>Check all that apply</i> ):						
☐ Solar Photovoltaic	□ Wind		Battery Storag	ge		
☐ Combined Heat and Power	☐ Solar Thermal		Other (please	e specify)		
Total Aggregate Nameplate Rating of I	Proposed DFR System (	(kW AC):				
Total Aggregate Namepiate Rating of I	Toposed DER System (	KW IIC).				
Phase Configuration of Proposed DER	System		☐ Single	☐ Three		
Service Voltage of Proposed DER Syst	em			Volts		
Will this be a stand-alone generator not including station service)?	interconnected to onsi	te load (not	□ Yes	□ No		
Please attach copy of site map for proposed project and any additional information that may be helpful in fulfilling the pre-application request. Site map should include true north, proposed project location including general layout, proposed service point location and major roadways.						
For Office Use Only						
Date Received:	Applica	ation Fee Received:	□ Y	es 🗆 No		
Date Completed Pre-Application Report	rt Sent to Applicant:					

Point of Interconnection – Additional Information			
Is the proposed interconnection to an existing service? (If no, applicant to the next section.)	nt is to skip	□ Yes	□ No
Customer Name:	C	ustomer Accoun	nt Number:
Existing loads at site $(kWAC)$ :			
List future additional loads planned for at site (in kWAC):			
Project Contact Information			
Full Name:			
Name of Business:			
Street Address:			
City:	State:	2	Cip Code:
Email:	Phone:	I	
Payment and Agreement			
<ul> <li>There is a non-refundable \$300 fee for the construction of a pre-applicacknowledge and understand that:</li> <li>Neither review of this application nor construction of any reperfee has been paid to Dakota Electric.</li> <li>Dakota Electric shall provide a report with only the available interconnection.</li> <li>The information provided by Dakota Electric may become our submission of a complete Interconnection Application.</li> <li>The confidentiality provision as listed in Section 5.9 of the Manufactor Interconnection Process MN DIP-DEA apply.</li> <li>Upon receipt of the report no guarantee is made by Dakota Electric may be approved for this proposed site.</li> </ul>	ort shall beg information atdated and r finnesota Dis	on the propose not useful at the stributed Energy	amount of the d point of time of Resource
Applicant Signature:	D	ate:	
***Please print clearly or type and return completed along w	ith any add	itional docume	ntation***

# Attachment 2: Simplified Application Form MINNESOTA DISTRIBUTED ENERGY RESOURCES

# **Simplified Interconnection Application**

Persons interested in applying for the interconnection of a distributed energy resource (DER) to Dakota Electric's distribution system through the Simplified Process are to fill out this Simplified Interconnection Application. The Simplified Interconnection Application is to be used for inverter-based DER technologies with the capacity of 20 kW AC or less and is to be filled out completely by the Applicant. The Simplified Application shall be returned to Dakota Electric with the requested material information and a non-refundable \$100 application fee.

Proposed DER interconnections to Dakota Electric's distribution submitted under the Simplified Process may be moved into the Fast Track Process if engineering screens are failed during the Simplified Interconnection Application review. Timeline for review of the Simplified Application is as follows:

- Upon receipt of a Simplified Interconnection Application Dakota Electric has 10 business days to review the application for completeness.
- If the application is deemed incomplete, Dakota Electric shall notify the Applicant of what additional information material is required.
- The Applicant has 5 business days to return the missing information material or their application may lose its queue position and be deemed withdrawn.
- Dakota Electric shall have a total of 20 business days to review the Simplified Interconnection Application, not including time waiting for additional information material to deem the application completed.
- Dakota Electric will notify the Application if the proposed DER system is preliminary approved for interconnection or if the proposed DER system will need to be moved in the Fast Track Process.

The items below shall be included with submittal of the Simplified Application to the Utility.  items will deem the Simplified Application incomplete.	Failure to include all
	Included
\$100 Non-Refundable Simplified Application Fee	☐ Yes
One-line diagram - Details required on one-line diagram specified at the end of the interconnection application.	☐ Yes
All Certified Equipment Manufacturer Specification Sheets	☐ Yes
Site Layout Drawing	☐ Yes
Copy of Insurance Declaration page or other acceptable proof of insurance	☐ Yes

#### Possible Additional Documentation

Checklist for Submission Dakota Flectric

- If an Application Agent is being used for this project, the Site Layout Drawing must be signed by the Interconnection Customer indicating Site Control of the DER interconnection location.
- If the DER export capacity is limited, include information material explaining the limiting capabilities.
- If Energy Storage is included with the proposed DER system include the Energy Storage Application.

**Simplified Interconnection Application** 

Interconnection Customer								
Full Name (must match the name of the existing service account):								
Account Number:	Meter Number	:						
Mailing Address:								
City:		State:	Zip Cod	le:				
Email:		Phone:						
Application Agent								
Is the Customer using an Application Agent for this appl	ication?	☐ Yes	□N	o				
lf Interconnection Customer is not using an App	olication Agent, p	please skip to the n	ext section.					
Application Agent:								
Company Name:								
Email:		Phone:						
For Office Use Only								
Application ID:	Queue Numbe							
Date Received:	Application Fe	ee Received:	☐ Yes	□ No				
Date Preliminary Approval Provided to Interconnection Customer:								

Dis	Distributed Energy Resource Information									
Loca	Location (if different from mailing address of Interconnection Customer):									
Will	Will the Proposed DER system be interconnected to an existing electric service? ☐ Yes ☐ No									
Is th	Is the Distributed Energy Resource a single generating unit or multiple?							Multiple		
DEF	R Type (Check all that apply):									
□s	olar Photovoltaic	□ Wi	ind			Energy	Storage			
	Combined Heat and Power		lar Ther	rmal		Other (	please s	pecif	Ty)	
	DER systems with Energy Storage	e must al	lso subn	nit the Energy St	torage Ap	plicatio	on to the	? Util	ity.	
Inve	erter Manufacturer:		Mode	el:						
Pha	se Configuration of Proposed DER Sys	stem:	1				Single		☐ Three	
Aggı	regate Inverter(s) Nameplate Rating:				$kW_{ac}$				$kVA_{ac}$	
Is the export capability of the DER limited?						□ Yes	[	□ No		
	If the DER export capacity is limited	l, include	e inform	nation material e	explaining	the lin	niting ca	ıpabil	lities.	
	regate DER Capacity (the sum of nam age devices at the PCC):	eplate c	capacity	of all generation	n and				$kW_{ac}$	
Inst	alled DER System Cost (before incent	ives):				\$				
Estir	mated Installation Date:									
Equ	Equipment Certification									
Is th	ne DER equipment certified?				☐ Yes	s [	□No			
Pl	ease list all certified equipment be sheets with			all certified equ Application su	•	-	acturer .	spec	ification	
	Equipment Type Certifying Entity									
1										
2										
3										
4										

Interconnection Agreement						
Propose DER interconnections that are also deemed Qualifying Facilities under Market 216B.164 are eligible to sign the Utility's Agreement for Cogeneration and Small Facilities. Included in this agreement are payment terms for excess power general DER system the Utility may purchase. Interconnection Customers may choose to a Distribution Interconnection Agreement.	Powe	er Proc py the p	luction roposed			
The Interconnection Customer request an Interconnection Agreement to also be executed.		l Yes	□ No			
Disclaimers – Must be completed by Interconnection Customer						
		Ir	itials			
The Interconnection Customer has opportunities to request a timeline extension during the interconnection process. Failure by the Interconnection Customer to me or request an extension for a timeline outlined in the Interconnection Process could result in a withdrawn queue position and the need to re-apply.						
Propose DER interconnection to the Utility's distribution submitted under the Simplified Process may be moved into the Fast Track Process if engineering scree are failed during the Simplified Application review.	ens					
Application Signature – Must be completed by Interconnection	Cust	tomer	,			
I designate the individual or company listed as my Application Agent to serve as ragent for the purpose of coordinating with Dakota Electric on my behalf through the interconnection process.	-	——Ir	nitials			
I hereby certify that, to the best of my knowledge, the information provided in this Application is true, and that I have appropriate Site Control in conformance with the Interconnection Process. I agree to abide by the Terms and Conditions for Interconnecting an Inverter-Based Distributed Energy Resource No Larger than 20 kW (Simplified Process) and return the Certificate of Completion when the DER has been installed.						
Applicant Signature: Date:						
***Please print clearly or type and return completed along with any additiona	l doc	ument	ation***			

#### **Information Required on One-Line Diagram**

An Interconnection Application must include a site electrical one-line diagram showing the configuration of all Distributed Energy Resource equipment, current and potential circuits, and protection and control schemes. The one-line diagram shall include:

- Applicant name.
- Application ID.
- Installer name and contact information.
- Address where DER system will be installed must match application address.
  - O Be sure to list the address for the protective interface equipment if the protective interface equipment is located at a different address than the DER system.
- Correct positions of all equipment, including but not limited to panels, inverter, and DC/AC disconnect. Include distances between equipment, and any labeling found on equipment.

This one-line diagram must be signed and stamped by a licensed Minnesota Professional Engineer if the Distributed Energy Resource is larger than 50 kW (if uncertified) and 250 kW (if certified.)

## **<u>Attachment 2: Simplified Application Form</u>** (cont'd)

# <u>Exhibit A – Terms and Conditions for Interconnecting an Inverter-Based DER No Larger</u> than 20 kW

1.0 Construction of the Facility

The Interconnection Customer (the "Customer") may proceed to construct (including operational testing not to exceed two hours) the Distributed Energy Resource(s) when Dakota Electric (the "Company") approves the Interconnection Application (the "Application").

2.0 Interconnection and Operation

The Customer may operate Distributed Energy Resource(s) and interconnect with the Company's electric system once all of the following have occurred:

- 2.1. Upon completing construction, the Customer will cause the Distributed Energy Resource(s) to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction, and
- 2.2. The Customer returns the Certificate of Completion to the Company, and
- 2.3. The Company:
- 2.3.1 Shall have the opportunity to witness test as described in Minnesota Technical Requirements, but takes no liability for the results of the test. Completes its inspection of the Distributed Energy Resource(s) to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes and standards. All inspections must be conducted by the Company, at its own expense, within ten Business Days after receipt of the Certificate of Completion and shall take place at a time agreeable to the Parties. The Company shall provide a written permission to operate authorization that the Distributed Energy Resource(s) has passed inspection or shall notify the Customer of what steps it must take to pass inspection within three (3) Business Days.

or

2.3.2 Does not schedule an inspection of the Distributed Energy Resource(s) within ten business days after receiving the Certificate of Completion, in which case the witness test is deemed waived (unless the Parties agree otherwise).

or

2.3.3 Waives the right to inspect the Distributed Energy Resource(s).

- 2.4. The Company has the right to disconnect the Distributed Energy Resource(s) in the event of: 1) improper installation or failure to return the Certificate of Completion, or 2) does not meet any of the requirements of this Agreement or, 3) if applicable, refusal to sign Uniform Statewide Contract.
- 2.5. Revenue quality metering equipment must be installed and tested in accordance with applicable Minnesota Technical Requirements.
- 2.6. If the Distributed Energy Resource(s) either: 1) does not use default IEEE 1547-2018 functions and settings; or 2) is not yet subject to a developed national standard or national certification, then at the option of the Company there needs to be in place an operating agreement to document and govern the operation of the Distributed Energy Resource(s).

# 3.0 Safe Operations and Maintenance

The Customer shall be fully responsible to operate, maintain, and repair the Distributed Energy Resource(s) as required to ensure that it complies at all times with the interconnection standards to which it has been certified.

#### 4.0 Access

The Company shall have access to the disconnect switch, if required by the Company, and metering equipment of the Distributed Energy Resource(s) at all times as described in Minnesota Technical Requirements. The Company shall provide reasonable notice to the Customer when possible prior to using its right of access.

#### 5.0 Disconnection

The Company may temporarily disconnect the Distributed Energy Resource(s) upon the following conditions:

- 5.1. For scheduled outages upon reasonable notice.
- 5.2. For unscheduled outages or emergency conditions.
- 5.3. If the Distributed Energy Resource does not operate in the manner consistent with these Terms and Conditions.
- 5.4. The Company shall inform the Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.
- 5.5. If the Customer is in Default it may be disconnected after a 60-day written notice is provided and the Default is not cured during this 60-day notice. This provision does not apply to disconnection based on outages or emergency conditions.

#### 6.0 Treatment Similar to Other Retail Customers

6.1. The Customer may be disconnected consistent with the rules and practices for disconnecting other retail electrical customers

#### 7.0 Indemnification

- 7.1. This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement.
- 7.2. The Parties shall at all times indemnify, defend, and save the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or inactions of its obligations under this agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.
- 7.3. This indemnification obligation shall apply notwithstanding any negligent or intentional acts, errors or omissions of the indemnified Party, but the indemnifying Party's liability to indemnify the indemnified Party shall be reduced in proportion to the percentage by which the indemnified Party's negligent or intentional acts, errors or omissions caused the damages.
- 7.4. Neither Party shall be indemnified for its damages resulting from its sole negligence, intentional acts or willful misconduct. These indemnity provisions shall not be construed to relieve any insurer of its obligation to pay claims consistent with the provisions of a valid insurance policy.
- 7.5. If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
- 7.6. If an indemnifying party is obligated to indemnify and hold any indemnified person harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.
- 8.0 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification

shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party. Insurance

The Parties agree to follow all applicable insurance requirements imposed by Minnesota. All insurance policies must be maintained with insurers authorized to do business in Minnesota. See MN DIP-DEA Section 5.10.

# 9.0 Limitation of Liability

Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever, except as allowed under paragraph 6.0.

#### 10.0 Termination

The agreement to operate in parallel may be terminated under the following conditions:

#### 10.1. By the Customer

By providing written notice to the Company.

# 10.2. By the Company

If the Distributed Energy Resource(s) fails to operate for any consecutive 12 month period or the Customer fails to remedy a violation of these Terms and Conditions.

#### 10.3. Permanent Disconnection

In the event this Agreement is terminated, the Company shall have the right to disconnect its facilities or direct the Customer to disconnect its Distributed Energy Resource.

#### 10.4. Survival Rights

This Agreement shall continue in effect after termination to the extent necessary to allow or require either Party to fulfill rights or obligations that arose under the Agreement.

#### 11.0 Assignment/Transfer of Ownership of the Facility

This Agreement shall survive the transfer of ownership of the Distributed Energy Resource(s) to a new owner when the new owner agrees in writing to comply with the terms of this Agreement and so notifies the Company.

# Exhibit B - For Energy Storage

Storage Application

This form is required in addition to a completed Interconnection Application form for any DER with an energy storage component.

Energy Storage							
Application for:	lication for: ☐ Stand-alone storage as DER ☐ Storage as component of DER						
Customer Account Number:							
Address of Generatin	Address of Generating Facility:						
City:		State:	Zip Code:				
Equipment Manufact	urer:		Equipment Model	:			
Max Continuous Real Power (In kW):  Max Continuous Apparent Power (In kVA):				(VA):			
Power Factor range of adjustability: Peak AC Energy (In kW				(In kW):			
Is the equipment UL required to be attach		Manufacturer specification.	ation sheet(s) are	☐ Yes	□ No		
source?		net energy metering eli	igible energy	☐ Yes	□ No		
Source charging the s	storage (Che	ck all that apply):					
☐ Utility	I	□ Wind	□ Sola	r			
□ Diesel		☐ Other (please special	fy)				
Is the storage configu	red to expor	t energy to the Area EF	PS?	☐ Yes	□ No		
Are the settings accessible to the end user?			☐ Yes	□ No			
For Office Use Only							
Application ID:			Queue Number:				
Date Received:							

Energy Storage
Available control operating modes:
Control modes being enabled for interconnection:
For non-export, how does the system determine the magnitude of customer load?
What is the process for changing operational modes of the energy storage?

 $Please\ attach\ any\ additional\ materials.$ 

# **Exhibit C – Certificate of Completion**

# **Certification of Completion**

The Interconnection Customer should complete the Distributed Energy Resource Certification of Completion for a proposed DER interconnection in the Simplified Process Track. As a condition of interconnection, a completed copy of this form must be returned to the Utility.

Distributed Energy Resource Information							
Interconnection Customer:							
DER Project Address:							
City:		State:	Zip Code:				
Application ID:	Meter Numb	ımber:					
Is the DER system owner-installed?	☐ Yes	☐ No (If no please of Info	completed Installer ormation)				
Installer Information							
Contact Name:							
N CD :							
Name of Business:							
Email:		Phone:					
Electrician Name		License #					
Electrical Permitting Authority							
The DER has been installed and inspected in compliance verified by the information provided below. (Please attac			-				
Inspector Name:		Date of Inspection:					
Electrical Inspection Permit Number	Authority Hovi	na Iuriadiation (aity/a	oounty).				
Electrical Inspection Permit Number: Authority Having Jurisdiction (city/county):							
***Please print clearly or type and return completed along with any additional documentation***							
Ear Office Hee Only							
For Office Use Only  Date Received:							

#### **Attachment 3: Interconnection Application Form**

# **Interconnection Application**

Persons interested in applying for the interconnection of a distributed energy resource to Dakota Electric's distribution system through the Fast Track or Study Processes are to fill out this Interconnection Application. The Interconnection Application is to be filled out completely by the applicant or as noted in each section of the application. Dakota Electric will contact the applicant within 10 business days once the Interconnection Application and the corresponding processing fee is submitted to Dakota Electric. Dakota Electric will then notify the applicant of the completeness of their application. If the application is deemed incomplete by Dakota Electric, they will provide the applicant with a list of missing material. The applicant will then have 10 business days to provide Dakota Electric with this information or request an extension, otherwise the application will be deemed incomplete and the applicant will lose their place in the queue. Sections that are noted with \* are required to be filled out.

# **Checklist for Submission to Utility**

The items below shall be included with submittal of the Interconnection Application to Dakota Electric. Failure to include all items will deem the Interconnection Application incomplete.

	Included
Non-Refundable Processing Fee	
Fast Track	
<ul> <li>\$100 + \$1/kW for Certified Systems</li> </ul>	☐ Yes
<ul> <li>\$100 + \$2/kW for Non-Certified Systems</li> </ul>	□ res
Study Process	
<ul> <li>\$1,000 + \$2/kW down payment. Additional study fees may apply.</li> </ul>	
One-line diagram	
This one-line diagram must be signed and stamped by a Professional Engineer	
licensed in Minnesota if the DER is uncertified greater than 50 kW AC or if	□ Yes
certified system is over 250 kW.	□ res
Details required on one-line diagram specified at the end of the interconnection	
application.	
Schematic drawings for all protection and control circuits, relay current circuits, relay	☐ Yes
potential circuits, and alarm/monitoring circuits	Li res
Inverter Specification Sheet(s) (if applicable)	☐ Yes
Documentation that describes and details the operation of protection and control	□ Voc
schemes	☐ Yes
Documentation showing site control	☐ Yes

#### Possible Additional Documentation

- If the DER export capacity is limited, include information material explaining the limiting capabilities.
- If Energy Storage is included with the proposed DER system include the Energy Storage Application.

General *							
Select Review Proces	ss:	ocess	Study Process				
Application is for:	Application is for:  New Distribution Energy Resource  Capacity Addition or Material Modification to Existing Distributed Energy Resource						
If Capacity Addition	or Material Modification to exis	sting facility, please	describe:				
Distributed Energy R	Resource will be used for what re	eason? (Check all tha	at apply):				
☐ Net Metering	☐ Supply Pov	ver to Interconnection	on Customer				
☐ Supply Power to A	Area EPS						
Installed DER System	Cost (before incentives):	\$					
Interconnection Cu	ustomer *						
Full Name (must mat	ch the name of the existing serv	vice account):					
Account Number:		Meter Number	:				
Mailing Address:							
City:			State:	Zip Code:			
Email:			Phone:				
2(01).			. Hone.				

<sup>\*</sup> Indicates section must be completed.

Application Agent *								
Is the Customer using a	n Applicati	on Agent for this appli	cation?		□ Yes		□ N	0
If Interconnection Customer is not using an Application Agent, please skip to the next section.								
Application Agent:								
Company Name:								
Email:				Phone:				
Distributed Energy Resource Information *								
Estimated Installation D	Date:							
Location (if different from mailing address of Interconnection Customer):								
Will the Proposed DER system be interconnected to an existing electric service? ☐ Yes ☐ No							□No	
Is the Distributed Energ	gy Resource	e a single generating u	nit or multiple?			Single	□м	ultiple
DER Type (Check all th	hat apply):							
☐ Solar Photovoltaic		□ Wind		□E	inergy S	Storage		
☐ Combined Heat and	Power	☐ Solar Ther	mal		Other (	please s	pecify	)
DER systems wi	ith Energy S	Storage must also subr	nit the Energy St	orage Ap	plicatio	on to the	Utilit <u>.</u>	y.
Total Number of Distribution pursuant to this Intercon	,		erconnected					
Phase configuration of Distributed Energy Resource(s):			□ Si	☐ Single Phase ☐ Three Phase				
Type of Generator:	☐ Inverte	r □ Syn	ynchronous					
Aggregate DER Capacity (the sum of nameplate capacity of all generation and storage devices at the PCC):								
		$kW_{ac}$						kVAR <sub>ac</sub>

 $<sup>* \</sup> Indicates \ section \ must \ be \ completed.$ 

Export Capacity Limitation *					
Is the export capability of the DER limited?	the export capability of the DER limited?				
If the DER export capacity is limited, complete the following sections and include information material explaining the limiting capabilities.					
Maximum Physical Export Capacity Requested:			$kW_{ac}$		
If Yes, please provide additional details describing meth	od of export limitation:				
Load Information *					
Interconnection Customer's or Customer-sited Load:					
Typical Reactive Load (if known):					
Equipment Certification*					
Is the DER equipment certified?	☐ Yes	s □ No			
Please list all certified equipment below. Include all certified equipment manufacturer specification sheets with the Interconnection Application submission.					
Equipment Type	ying Entity				
1		76 =7			
2					
3					
4					

<sup>\*</sup> Indicates section must be completed.

Prime Mover *								
Please indicate the prime	mover:							
☐ Solar Photovoltaic	☐ Microturbine ☐ Fuel				el Cell			
☐ Reciprocating Engine	☐ Gas Turbine ☐			☐ Other (	please speci	ify)		
Is the prime mover compatible with certified protection equipment package?						□No		
DER Manufacturer:	Mode	Model Name & Number:			Version:			
List of Adjustable Set Po	ints for Protection Eq	quipment o	or Software:					
Summer Name Plate Rati	Summer Name Plate Rating: $kW_{ac}$ Summer			r Name Plate Rating: $kW_{ac}$				
Winter Name Plate Ratin	ter Name Plate Rating: $kVA_{ac}$ Winter			Name Plate Rating: $kVA_{ac}$				
Rated Power Factor:	Leading:			Lagging:	Lagging:			
A completed Power S	System Load Flow dat	ta sheet m	ust be supplie	ed with the In	terconnectio	on Appli	cation.	
Only appropriate	sections beyond this	point unti	l the signature	e page are to	be complete	ed.		
Distributed Energy Resource Characteristic Data (for Inverter-based machines)								
Max design fault contrib	ution current:							
Is your response to the previous field an Instantaneous or R measurement?			or RMS	RMS				
Harmonic Characteristics	::			,				
Start-up Requirements:								

 $<sup>* \</sup> Indicates \ section \ must \ be \ completed.$ 

Distributed Energy Resource Characteristic Data (for Synchronous machines)					
RPM Frequency:	Neutral Grounding Resistor:				
Direct Axis Synchronous Reactance, $X_d$ :	Zero Sequence Reactance, $X_0$ :				
Direct Axis Transient Reactance, $X'_d$ :	KVA Base:				
Direct Axis Subtransient Reactance, $X_d''$ :	Field Volts:				
Negative Sequence Reactance, $X_2$ :	Field Amperes:				

Please provide the appropriate IEEE model block diagram of excitation system, governing system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be submitted.

Distributed Energy Resource Character	istic Data (for Induction machines)
RPM Frequency:	Neutral Grounding Resistor:
Motoring Power (kW):	Exciting Current:
Heating Time Constant:	Temperature Rise:
Rotor Resistance, $R_r$ :	Frame Size:
Stator Resistance, $R_s$ :	Design Letter:
Stator Reactance, $X_s$ :	Reactive Power Required In Vars (No Load):
Rotor Reactance, $X_r$ :	Reactive Power Required In Vars (Full Load):
Magnetizing Reactance, $X_m$ :	Total Rotating Inertia, H:
Short Circuit Reactance, $X_d''$ :	

Interconnection Facilitie	s Inform	ation					
Will a transformer be used between the DER and the Point of Common Coupling?							
Will the transformer be provided by the Interconnection Customer? If yes, please fill in the fields below.						□ Yes	□ No
Proposed location of protection		rface equipment on	prope	erty:			
Transformer Data (For Inte	rconnection	on Customer-Owne	d Tran	sformer)			
What is the phase configura	ation of th	e transformer?			☐ Sing	le Phase	☐ Three Phase
Size (kVA):		Transformer Impe	edance	(%):	On kVA	Base:	
Transformer Volts: (Primary)	Delta:		Wye			Wye Gro	unded:
Transformer Volts: (Secondary)	Delta:		Wye			Wye Gro	unded:
Transformer Volts: (Tertiary)	Delta:		Wye		Wye Grounded:		unded:
Transformer Fuse Data (Fo	r Intercon	nection Customer-C	Owned	Fuse)			
Manufacturer:	Type:		Size:			Speed:	
Interconnecting Circuit Bre	aker (For	Interconnection Cu	stome	r-Owned Circ	cuit Breake	er)	
Manufacturer:			Туре	:			
Load Rating (in Amps):		Interrupting Ratin	g (In Amps): Trip Spee			ed (Cycles	):
Interconnection Protective	Relays (F	or Microprocessor (	Contro	lled Relays)			
Setpo	oint Funct	ion		Mini	mum		Maximum

Type:		Style/Catalog No.:		Proposed Setting:		
		Style/Catalog No ·				
Type		Style/Catalog No.:		Proposed Setting:		
Турс.		Style/Catalog No.:		Proposed Setting:		
Type:		Style/Catalog No.:		Proposed Setting:		
Type:		Style/Catalog No.:		Proposed Setting:		
Type: Accur		racy Class: Proj		oposed Ratio Connection:		
Type: Accur		racy Class: Propose		ed Ratio Connection:		
:						
Type:		Accuracy Class:		Proposed Ratio Connection:		
Type:		Accuracy Class:		ed Ratio Connection:		
<u>.</u> :	Type:  ype:  ype:	Type: Type:  Accur.  ype: Accur.	Type: Style/Catalog No.:  Type: Style/Catalog No.:  ype: Accuracy Class:  ype: Accuracy Class:	Type: Style/Catalog No.:  Type: Style/Catalog No.:  Ype: Accuracy Class: Propose  Ype: Accuracy Class: Propose  Ype: Accuracy Class: Propose		

For Office Use Only			
Application ID:			
Date Received:	Application Fee Received:	☐ Yes	□ No
Date Completed:			

Interconnection Agreement			
Propose DER interconnections that are also deemed Qualifying Facilities less than 40 kV Statute 216B.164 are eligible to sign the Uniform Statewide Contract Agreement for Cogo Power Production Facilities. Included in this agreement are payment terms for excess poproposed DER system Dakota Electric may purchase. The Interconnection Customer may the Dakota Electric's Distribution Interconnection Agreement (MN DIA-DEA)	enerai ower g	tion and generate	d Small ed by the
For Qualifying Facilities rated less than 40kW: The Interconnection Customer requests an Interconnection Agreement to also be executed.		] Yes	□No
Disclaimers – Must be completed by Interconnection Customer			
		Ir	nitials
The Interconnection Customer has opportunities to request a timeline extension during the interconnection process (See MN DIP-DEA-DEA Section 1.8.2 and 5.2.3). Failure by the Interconnection Customer to meet or request an extension for a timeline outlined in the Interconnection Process could result in a withdrawn queue position and the need to re-approximately approximately app	<b>;</b>		
Propose DER interconnection to the Utility's distribution submitted under the Fast Track Process may be moved into the Study Process if engineering screens are failed during the Interconnection Application review.			
Application Signature – Must be completed by Interconnection Customer			
I designate the individual or company listed as my Application Agent to serve as my ager for the purpose of coordinating with Dakota Electric on my behalf throughout the	nt		
interconnection process.		Ir	nitials
I hereby certify that, to the best of my knowledge, the information provided in this Applic have appropriate Site Control in conformance with the Interconnection Process. I agree to and Conditions of the Interconnection Process and will return the Certificate of Completic been installed.	abide	e by the	Terms
Applicant Signature: Date:			
***Please print clearly or type and return completed along with any additional de	ocum <sup>,</sup>	entatio	n***

#### **Information Required on One-Line Diagram**

An Interconnection Application must include a site electrical one-line diagram showing the configuration of all Distributed Energy Resource equipment, current and potential circuits, and protection and control schemes. The one-line diagram shall include:

- Applicant name.
- Application ID.
- Installer name and contact information.
- Address where DER system will be installed must match application address.
  - O Be sure to list the address for the protective interface equipment if the protective interface equipment is located at a different address than the DER system.
- Correct positions of all equipment, including but not limited to panels, inverter, and DC/AC disconnect. Include distances between equipment, and any labeling found on equipment.

This one-line diagram must be signed and stamped by a licensed Minnesota Professional Engineer if the Distributed Energy Resource is larger than 50 kW (if uncertified) and 250 kW (if certified.)

#### **Attachment 4: Certification Codes and Standards**

Prior to Commission approval of the update of Minnesota Technical Requirements (anticipated in Late 2019), the existing Minnesota Technical Requirements and the following standards shall be used in conjunction with the Minnesota Interconnection Process (MN DIP-DEA) and Minnesota Interconnection Agreement (MN DIA-DEA) for Distributed Energy Resources. Once approved, the Minnesota DER Technical Interconnection and Interoperability Requirements will supersede this attachment.

When the stated version of the following standards is superseded by an approved revision then that revision shall apply.

IEEE 1547-2003 IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems

IEEE 1547a-2014 IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems – Amendment 1

IEEE 1547.1-2005 IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems

IEEE 1547.1a-2015 (Amendment to IEEE Std 1547.1 – 2005) IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems – Amendment 1

UL 1741 Inverters, Converters, Controllers, and Interconnection System Equipment for Use in Distributed Energy Resources (2010)

NFPA 70 (2017), National Electrical Code

IEEE Std C37.90.1(2012) (Revision of IEEE Std C37.90.1-2002), IEEE Standard for Surge Withstand Capability (SWC) Tests for Protective Relays and Relay Systems Associated with Electric Power Apparatus

IEEE Std C37.90.2 (2004) (Revision of IEEE Std C37.90.2-1995), IEEE Standard for Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers

<sup>&</sup>lt;sup>14</sup> This is an interim document while the Commission updates the Minnesota Distributed Energy Resource Interconnection and Interoperability Technical Requirements which includes alignment with the anticipated final IEEE 1547-2018 revision. For the transition period between Minnesota's existing statewide interconnection standards and the updated standards, both inverters certified to existing 1547.1 and 1547.1a-2015 (most current version); as well as, certified inverters per the expected revised 1547.1 standard should be acceptable.

IEEE Std C37.108-20021989 (Revision of C37.108-19892002), IEEE Guide for the Protection of Network Transformers

IEEE Std C57.12.44-2014 (Revision of IEEE Std C57.12.44-2005), IEEE Standard Requirements for Secondary Network Protectors

IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in Low-Voltage (1000V and Less) AC Power Circuits

IEEE Std C62.41.2-2002\_Cor 1-2012 (Corrigendum to IEEE Std C62.41.2-2002) - IEEE Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and Less) AC Power Circuits Corrigendum 1: Deletion of Table A.2 and Associated Text

IEEE Std C62.45-2002 (Revision of IEEE Std C62.45-1992) - IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000 V and less) AC Power Circuits

ANSI C84.1-(2016) Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)

IEEE Standards Dictionary Online, [Online]

NEMA MG 1-2016, Motors and Generators

IEEE Std 519-2014, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems

# **Attachment 5: Certification of Distributed Energy Resource Equipment**

1.0 Distributed Energy Resource (DER) equipment proposed for use in an interconnection system shall be considered certified for interconnected operation if: 1) it has been tested in accordance with industry standards for continuous utility interactive operation in compliance with the appropriate codes and standards referenced below by any Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration to test and certify interconnection equipment pursuant to the relevant codes and standards listed in MN DIP-DEA

- 2.0 Attachment 4, 2) it has been labeled and is publicly listed by such NRTL at the time of the interconnection application, and 3) such NRTL makes readily available for verification all test standards and procedures it utilized in performing such equipment certification, and, with consumer approval, the test data itself. The NRTL may make such information available on its website and by encouraging such information to be included in the manufacturer's literature accompanying the equipment.
- 3.0 The Interconnection Customer must verify that the assembly and use of the equipment falls within the use or uses for which the equipment was tested, labeled, and listed by the NRTL.
- 4.0 Certified equipment shall not require further type-test review, testing, or additional equipment to meet the requirements of this interconnection procedure; however, nothing herein shall preclude the need for a DER Design Evaluation or an on-site commissioning test by the parties to the interconnection as provided for in the Minnesota Technical Requirements.
- 5.0 If the certified equipment package includes only interface components (switchgear, inverters, or other interface devices), then an Interconnection Customer must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and is consistent with the testing and listing specified for this type of interconnection equipment.
- 6.0 Provided the generator or electric source, when combined with the equipment package, is within the range of capabilities for which it was tested by the NRTL, and does not violate the interface components' labeling and listing performed by the NRTL, no further typetest review, testing or additional equipment on the customer side of the Point of Common Coupling shall be required to be considered certified for the purposes of this interconnection procedure; however, nothing herein shall preclude the need for a DER Design Evaluation or an on-site commissioning test by the parties to the interconnection as provided for in the Minnesota Technical Requirements.
- 7.0 An equipment package does not include equipment provided by the Area EPS.

# **Attachment 6: System Impact Study Agreement**

20 by and between,
a organized and existing under the laws of the State of
, ("Interconnection Customer"), and Dakota Electric Association, a Cooperative Corporation existing under the laws of the State of Minnesota, ("Area EPS Operator or Dakota Electric"). 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; and
WHEREAS, the Interconnection Customer desires to interconnect the DER with Dakota Electric's electric system; and
WHEREAS, the Interconnection Customer has requested Dakota Electric to perform a system impact study(s) to assess the impact of interconnecting the DER with Dakota Electric's electric System, and potential Affected System(s);
<b>NOW, THEREFORE</b> , in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:
1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard Minnesota Distributed Energy Resources Interconnection Procedures (MN DIP-DEA.)
2.0 The Interconnection Customer elects and Dakota Electric shall cause to be performed a distribution system impact study(s) consistent with the MN DIP-DEA. The scope of a distribution system impact study shall be subject to the assumptions set forth in this Agreement; including Attachment A.
3.0 A system impact study will be based upon the technical information provided by Interconnection Customer in the Interconnection Application. Dakota Electric 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.
- 4.0 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 known construction and modifications to the Dakota Electric system that are required as a result of the Interconnection Application and non-binding good faith estimates of cost responsibility and time to construct.
- 5.0 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.
- 6.0 Affected Systems may participate in the preparation of a system impact study, with a division of costs among such entities as they may agree. All Affected Systems shall be afforded an opportunity to review and comment upon a system impact study that covers potential adverse system impacts on their electric systems.
- 7.0 If Dakota Electric 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 paragraph 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 Dakota Electric'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 Dakota Electric's electric system.
- 8.0 A deposit of the equivalent of the good faith estimated cost of a distribution system impact study shall be required from the Interconnection Customer when the signed Agreement is provided to Dakota Electric.
- 9.0 Any study fees shall be based on Dakota Electric's actual costs and will be invoiced to the Interconnection Customer within 20 Business Days after the study is completed and delivered and will include a summary of professional time.
- 10.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 20 Business Days on receipt of the invoice or resolution of any dispute. If

the deposit exceeds the invoiced fees, Dakota Electric shall refund such excess within 20 Business Days of the invoice without interest.

#### 11.0 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.

#### 12.0 Amendment

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

#### 13.0 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.

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

#### 15.0 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument. Electronic signatures are acceptable if Dakota Electric has made such a determination pursuant to MN DIP-DEA 1.2.1.1.

#### 16.0 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.

#### 17.0 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.

#### 18.0 Subcontractors

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

- 18.1. The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall Dakota Electric 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.
- 18.2. The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

#### 19.0 Inclusion of Dakota Electric's 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 Dakota Electric, which tariff schedules and rules are hereby incorporated into this Agreement by this reference. Notwithstanding any other provisions of this Agreement, Dakota Electric shall have the right to unilaterally file with the Minnesota Public Utilities Commission, pursuant to the Commission's rules and regulations, an application for change in rates, charges, classification, service, tariff, or rule or any agreement relating thereto. The Interconnection Customer shall also have the right to unilaterally file with the Minnesota Public Utilities Commission, pursuant to the Commission's rules and regulations, an application for change in rates, charges, classification, service, tariff, or rule or any agreement relating thereto. Each Party shall be have the right to protest any such filing by the other Party and/or to participate fully in any proceeding before the Minnesota Public Utilities Commission in which such modifications may be considered, pursuant to the Commission's rules and regulations.

**IN WITNESS THEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents.

[Dakota Electric Association]	[Insert name of Interconnection Customer]		
Signed:	Signed:		
Name (Printed):	Name (Printed):		
Title:	Title:		
Date:	Date:		

#### Attachment 6: System Impact Study Agreement (cont'd)

#### **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 (listed below) are to be provided by the Interconnection Customer and Dakota Electric. Dakota Electric 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, Dakota Electric shall list below any additional technical data that is required to adequately perform the System Impact Study. As indicated in MN DIP-DEA section 4.3.3, this information is to be returned with the signed system impact study agreement and deposit.

# **Attachment 7: Facilities Study Agreement**

THIS AGREEMENT is made and entered into thisday of
20 by and between
aorganized and existing under the laws of the State of
Dakota Electric Association, a Cooperative Corporation
existing under the laws of the State of Minnesota,
("Area EPS Operator or Dakota Electric"). Interconnection Customer and Area EPS Operator each may be referred to as a "Party," or collectively as the "Parties."
RECITALS
<b>WHEREAS</b> , the Interconnection Customer is proposing to develop a Distributed Energy Resource or generating capacity addition to an existing Distributed Energy Resource consistent with the Interconnection Application completed by the Interconnection Customer on; and
<b>WHEREAS</b> , the Interconnection Customer desires to interconnect the Distributed Energy Resource with Dakota Electric's Distribution System; and
<b>WHEREAS</b> , Dakota Electric has completed Initial Review, Supplemental Review, and/or a system impact study and provided the results of said review to the Interconnection Customer, or determined none was required; and
WHEREAS, the Interconnection Customer has requested Dakota Electric to perform a distribution facilities study to specify, and estimate the cost of, the equipment, engineering, procurement and construction work needed to implement the conclusions of the above noted review in accordance with Good Utility Practice to physically and electrically connect the Distributed Energy Resource with Dakota Electric's Distribution System.
NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein

the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard State of Minnesota Distributed Energy Resources Interconnection Procedures (MN DIP-DEA).
- 2.0 The Interconnection Customer elects and Dakota Electric shall cause a distribution facilities study consistent with the standard MN DIP-DEA to be performed. The scope of the facilities study shall be subject to data provided in Attachment A to this Agreement.
- 3.0 The distribution facilities study shall specify and estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the system impact study(s). The distribution facilities study shall also identify: 1) the electrical switching configuration of the equipment, including, without limitation, transformer, switchgear, meters, and other station equipment, 2) the nature and estimated cost of Dakota Electric's Interconnection Facilities and Distribution Upgrades necessary to accomplish the interconnection, and 3) an estimate of the time required to complete the construction and installation of such facilities.
- 4.0 Dakota Electric may propose to group facilities required for more than one Interconnection Customer in order to minimize facilities costs through economies of scale, but any Interconnection Customer may require the installation of facilities required for its own Distributed Energy Resource if it is willing to pay the costs of those facilities.
- 5.0 A deposit of the good faith estimate of the distribution facilities study costs shall be required from the Interconnection Customer and provided when the signed Agreement is provided to Dakota Electric.
- 6.0 Any study fees shall be based on Dakota Electric's actual costs and will be invoiced to the Interconnection Customer within 20 Business Days after the study is completed and delivered and will include a summary of professional time.
- 7.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 20 Business Days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, Dakota Electric shall refund such excess within 20 Business Days of the invoice without interest.
- 8.0 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.

#### 9.0 <u>Amendment</u>

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

#### 10.0 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.

#### 11.0 Waiver

- 11.1. 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.
- 11.2. Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from Dakota Electric. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.0 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument. Electronic signatures are acceptable if Dakota Electric has made such a determination pursuant to MN DIP-DEA 1.2.1.1.

#### 13.0 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.

#### 14.0 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.

#### 15.0 Subcontractors

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

- 15.1. The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall Dakota Electric 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.
- 15.2. The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

#### 16.0 Inclusion of Dakota Electric's 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 Dakota Electric, which tariff schedules and rules are hereby incorporated into this Agreement by this reference. Notwithstanding any other provisions of this Agreement, Dakota Electric shall have the right to unilaterally file with the MPUC, pursuant to the MPUC's rules and regulations, an application for change in rates, charges, classification, service, tariff, or rule or any agreement relating thereto. The Interconnection Customer shall also have the right to unilaterally file with the MPUC, pursuant to the MPUC's rules and regulations, an application for change in rates, charges, classification, service, tariff, or rule or any agreement relating thereto. Each Party shall be have the right to protest any such filing by the other Party and/or to participate fully in

any proceeding before the MPUC in which such modifications may be considered, pursuant to the MPUC's rules and regulations.

### 17.0 <u>Data to be provided by the Interconnection Customer with the Facilities Study Agreement</u>

- 17.1. The Interconnection Customer shall be available to meet on site with Dakota Electric within 5 Business Days of signing the Facilities Study Agreement. The personnel furnished by the Interconnection Customer for this site meeting shall bring detailed information on the site layout. Dakota Electric may request the Interconnection Customer physically places stakes at the location of the major components.
- 17.2. The Interconnection Customer shall furnish a final site plan detailing the location of major equipment at the time this agreement is returned. The Point of Common Coupling (PCC) and Point of DER Connection (PoC) shall be clearly marked. The site plan shall depict any nearby roads and be labeled with the road name. Accurate dimensions shall be included on the site plan. The proper emergency (911) address, corresponding to the site, shall be labeled on the site plan.
- 17.3. The Interconnection Customer shall furnish a final one-line diagram detailing the electrical connections between major components. The one-line shall be returned with the signed Facilities Study Agreement.
- 17.4. Technical cut sheets on all equipment related to metering shall be provided by the Interconnection Customer along with the signed Facilities Study Agreement.
- 17.5. If available, copies of Conditional Use Permit(s) from all necessary authorities shall be returned by the Interconnection Customer with the signed Facilities Study Agreement.
- 17.6. The Interconnection Customer shall secure any necessary easements from private land owners prior to signing the Facilities Study Agreement.

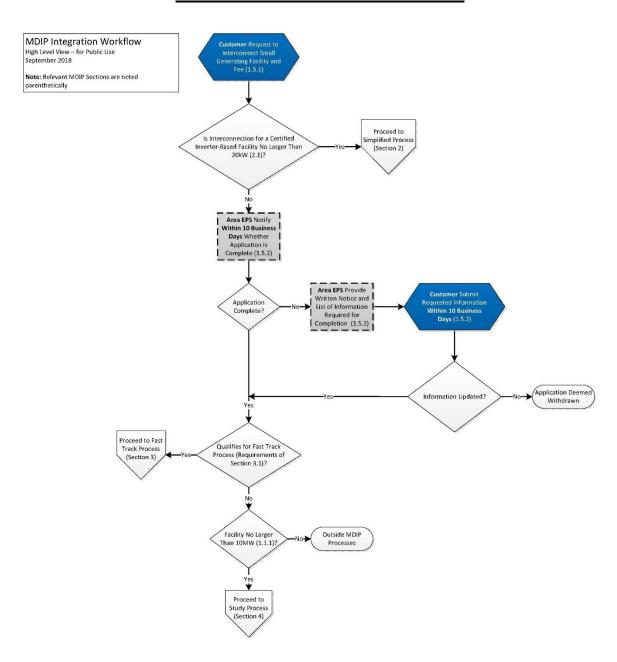
  Documentation of any such agreements shall be provided to Dakota Electric.
- 17.7. In the event that Dakota Electric determines a site survey is necessary in order to complete a Facilities Study, the Interconnection Customer shall make good faith efforts to complete the site survey in a timely manner.
- 17.8. The Facilities Study assumes all land use permits required for the interconnection will be approved by the proper authorities. Permits are submitted after the Interconnection Agreement is signed and may impact project costs (i.e. overhead to underground requirement.)
- 17.9. The Interconnection Customer and Dakota Electric shall provide a single point of contact for design and construction related matters. The

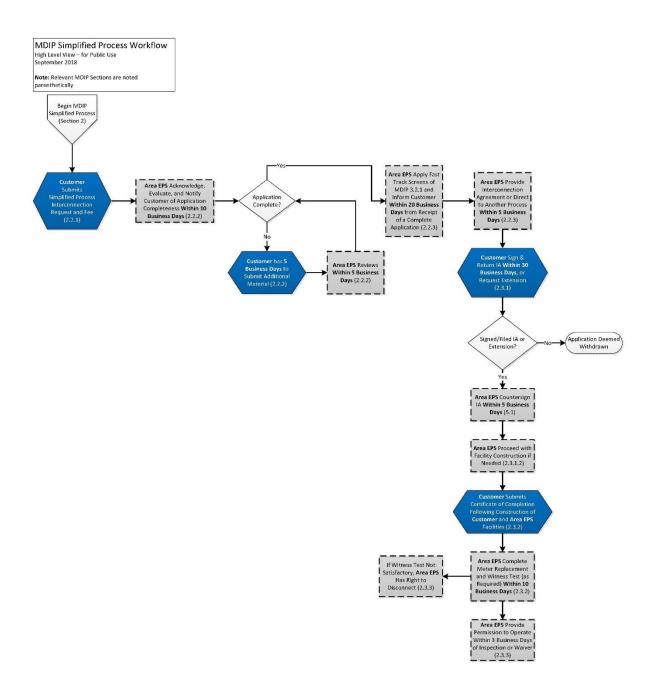
- Interconnection Customer single point of contact shall respond in a timely manner to Dakota Electric's questions during the Facilities Study.
- 17.10. In the event that an Interconnection Customer does not provide the necessary information described in this agreement, or if the Interconnection Customer takes more than five (5) Business Days to respond to a question during the Facilities Study, the Facilities Study timeframe shall pause until the question is resolved.

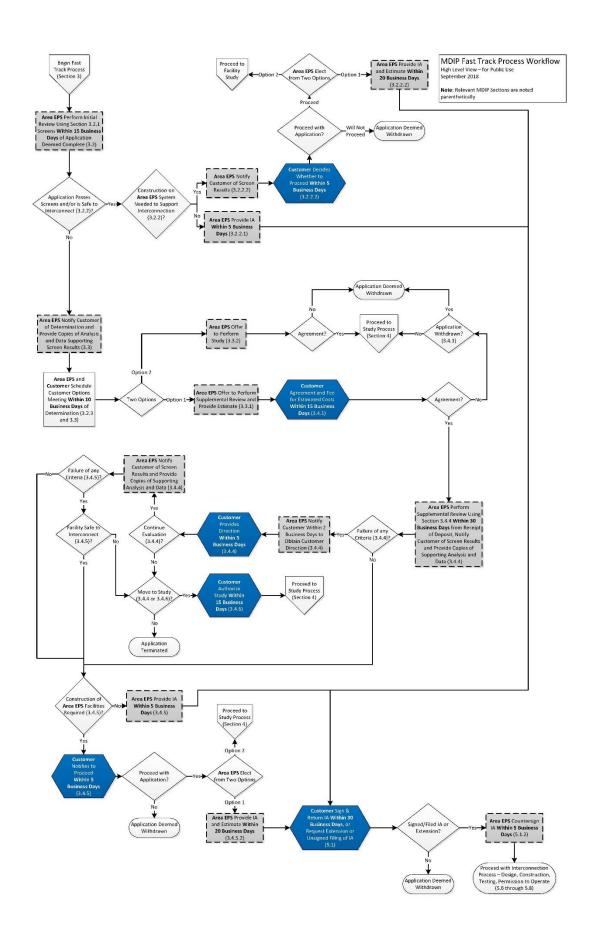
IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents.

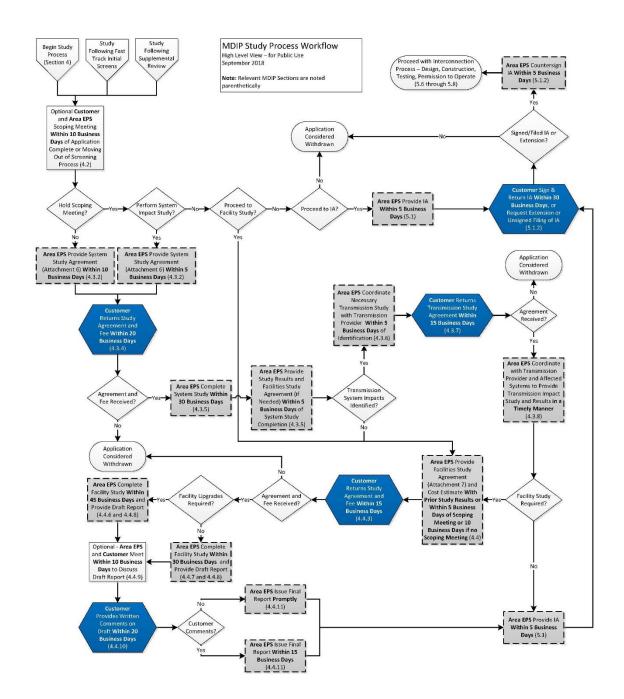
[Dakota Electric Association]	[Insert name of Interconnection Customer]			
Signed	Signed			
Name (Printed):	Name (Printed):			
Title	Title			
Date:	Date:			

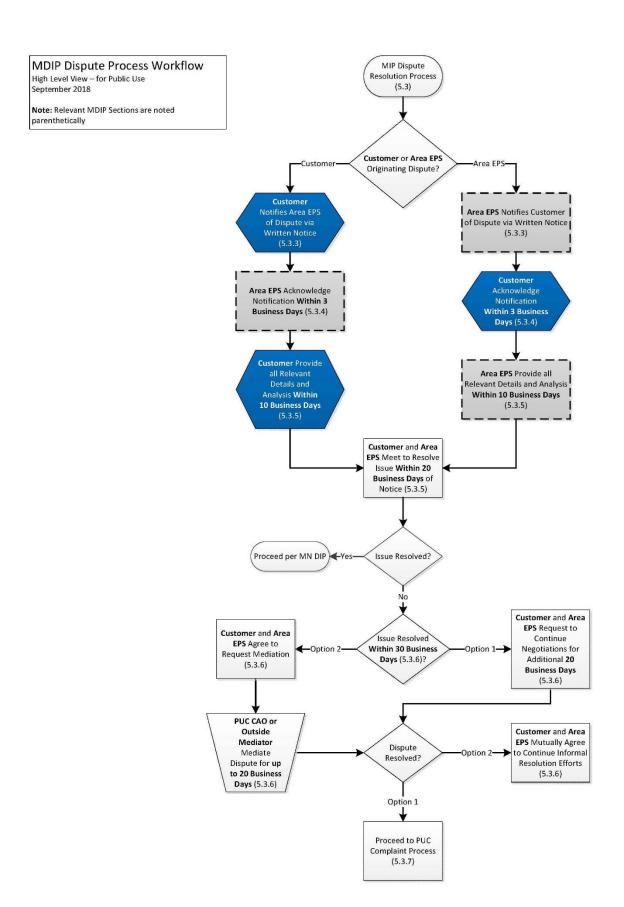
### **Attachment 8: MN DIP-DEA Flow Charts**













# Minnesota Distributed Energy Resource Interconnection Agreement (MN DIA-DEA)

(Adopted for use by Dakota Electric Association from the Minnesota Distributed Energy Resource Interconnection Agreement MN DIA)

V. 2.3

1/3/2019

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This Interconnection Agreem		ociation ("Dakota	Electric"), and	
each hereinafter sometimes rethe "Parties."				
Area EPS Operator Inform	ation:			
Area EPS Operator:	Dakota Electric Asso	ociation		
Attention:	Generation Interconnection Coordinator			
Address:	4300 220 <sup>th</sup> St West			
City: Farmington	State: Minnesota	Zip: 55024		
Phone: 651-463-6212	Email:		-	
Interconnection Customer I  Interconnection Customer I  Attention:  Address:  City:	omer:			
Phone:			Zīp	
Interconnection Customer Ap Distributed Energy Resource Type of DER System Nameplate Rating DER capacity (as desc	Information (To be contained to be contained t	mpleted by Dakota El P, Solar+Storage) EA 5.14.3))	(ac)	
Address of DER syste		Zip code:		

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

# 1. Article 1. Scope and Limitations of Agreement

- 1.1. This Agreement is intended to provide for the Interconnection Customer to interconnect at the Point of Common Coupling and operate a Distributed Energy Resource with a Nameplate Rating of 10 Megawatts (MW) or less in parallel with Dakota Electric at the location identified above and in the Interconnection Application.
- 1.2. This Agreement shall be used for all Interconnection Applications submitted under the Minnesota Distributed Energy Resources Interconnection Process (MN DIP-DEA) except for those submitted and processed under the Simplified Process contained in MN DIP-DEA Section 2 or qualify and chooses under MN DIP-DEA Section 1.1.5 for the Uniform Statewide Contract to replace the need for this Agreement.
- 1.3. This Agreement governs the terms and conditions under which the Interconnection Customer's Distributed Energy Resource will interconnect with, and operate in parallel with, Dakota Electric's Distribution System.
- 1.4. Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1, the MN DIP-DEA, or the body of this Agreement.
- 1.5. This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity with the applicable Area EPS Operator.
- 1.6. Nothing in this Agreement is intended to affect any other agreement between Dakota Electric and the Interconnection Customer.

#### 1.7. Responsibilities of the Parties

- 1.7.1. The Parties shall perform all obligations of this Agreement in accordance with the MN DIP-DEA, Minnesota Technical Requirements, all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.
- 1.7.2. The Interconnection Customer shall construct, interconnect, operate and maintain its Distributed Energy Resource and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule and, in accordance with this Agreement, and with Good Utility Practice.

- 1.7.3. Dakota Electric shall construct, operate, and maintain its Distribution System and its Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.
- 1.7.4. The Interconnection Customer agrees to construct its facilities or systems in accordance with the Minnesota Technical Requirements and this Agreement; including, applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Distributed Energy Resource so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of Dakota Electric and any Affected Systems.
- 1.7.5. Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now owns or subsequently owns unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of common coupling. Dakota Electric and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect Dakota Electric's Distribution System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.
- 1.7.6. Dakota Electric shall coordinate with all Affected Systems to support the interconnection.

#### 1.8. Parallel Operation Obligations

Once the Distributed Energy Resource has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Distributed Energy Resource in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for Dakota Electric's Distribution System provided or referenced in an attachment to this Agreement and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement. The Minnesota Technical Requirements for interconnection are covered in a separate document, a copy of which has been made

available to the Interconnection Customer and incorporated and made part of this Agreement by this reference.

#### 1.9. Metering

As described in MN DIP-DEA 5.4, the Interconnection Customer shall be responsible for Dakota Electric'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.

#### 1.10. Distributed Energy Resource Capabilities and Grid Reliability

- 1.10.1. The Minnesota Technical Requirements outlines the Parties responsibilities consistent with IEEE 1547 Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces which provides requirements relevant to the interconnection and interoperability performance, operation and testing, and, to safety, maintenance and security considerations.
- 1.10.2. Dakota Electric may offer the Interconnection Customer the option to utilize required DER capabilities to mitigate Interconnection Customer costs related to Upgrades or Interconnection Facilities to address anticipated system impacts from the engineering review (i.e. Initial Review, Supplemental Review, or Study Process described in the MN DIP-DEA.)

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

#### 2.1. Equipment Testing and Inspection

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

#### 2.2. Authorization Required Prior to Parallel Operation

As described in MN DIP-DEA Section 5.8, Dakota Electric shall use Reasonable Efforts to list applicable parallel operation requirements by attaching the Minnesota Technical Requirements and/or including them in Attachment 5 to this Agreement. Additionally, Dakota Electric shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. Pursuant to the MN DIP-DEA 5.8.2, the Interconnection Customer shall not operate its Distributed Energy Resource in parallel

with Dakota Electric's Distribution System without prior written authorization of Dakota Electric.

#### 2.3. Right of Access

- 2.3.1. Upon reasonable notice, Dakota Electric may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Distributed Energy Resource first produces energy to inspect the interconnection, and observe the commissioning of the Distributed Energy Resource (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify Dakota Electric at least five Business Days prior to conducting any on-site verification testing of the Distributed Energy Resource.
- 2.3.2. Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, Dakota Electric shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.
- 2.3.3. Each Party shall be responsible for its costs associated with following this article as outlined in MN DIP-DEA Section 5.7.2 and the Minnesota Technical Requirements.

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

#### 3.1. Effective Date

This Agreement shall become effective upon execution by the Parties.

#### 3.2. Term of Agreement

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

#### 3.3. Termination

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

3.3.1. The Interconnection Customer may terminate this Agreement at any time by giving Dakota Electric 20 Business Days written notice.

- 3.3.2. Either Party may terminate this Agreement after Default pursuant to article 7.7.
- 3.3.3. Upon termination of this Agreement, the Distributed Energy Resource will be disconnected from Dakota Electric's Distribution System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this MN DIA-DEA or such non-terminating Party otherwise is responsible for these costs under this MN DIA-DEA.
- 3.3.4. The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5. The provisions of this article shall survive termination or expiration of this Agreement.

#### 3.4. Temporary Disconnection

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

#### 3.4.1. <u>Emergency Conditions</u>

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

#### 3.4.2. Routine Maintenance, Construction, and Repair

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

Electric shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

#### 3.4.3. Forced Outage

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

#### 3.4.4. Adverse Operating Effects

Dakota Electric 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 Dakota Electric'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, Dakota Electric may disconnect the Distributed Energy Resource. Dakota Electric shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

#### 3.4.5. Modification of the Distributed Energy Resource

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

#### 3.4.6. Reconnection

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

#### 3.4.7 Treatment Similar to Other Retail Customers

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

#### 3.4.8 Disconnection for Default

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

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

#### 4.1. Interconnection Facilities

- 4.1.1. The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. Dakota Electric shall provide a good faith estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and Dakota Electric.
- 4.1.2. The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing Dakota Electric's Interconnection Facilities.

#### 4.2. Distribution Upgrades

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

# 5. Article 5. Cost Responsibility for Network Upgrades

#### 5.1. Applicability

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

#### 5.2. Network Upgrades

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

#### 5.2.1. Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to Dakota Electric, 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 Dakota Electric's Tariff and Affected System's Tariff for transmission services with respect to the Distributed Energy Resource. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1. Notwithstanding the foregoing, the Interconnection Customer, Dakota Electric, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as Dakota Electric 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 Dakota Electric 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 to Dakota Electric for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond 20 years from the commercial operation date.

5.2.1.2. If the Distributed Energy Resource fails to achieve commercial operation, but it or another Distributed Energy Resource is later constructed and requires use of the Network Upgrades within five (5) years of being constructed, Dakota Electric and Affected System operator (after receiving payment in the amount of the cost to build these Network Upgrades from the other Distributed Energy Resource who is expected to use the Network Upgrades) shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the Distributed Energy Resource, if different, is responsible for identifying the entity to which reimbursement must be made.

#### 5.3. Special Provisions for Affected Systems

Unless Dakota Electric provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

#### 5.4. Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Distributed Energy Resource.

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

#### 6.1. Billing and Payment Procedures and Final Accounting

- 6.1.1. Dakota Electric 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 MN DIP-DEA 5.6.5, or as otherwise agreed to by the Parties.
- 6.1.2. Within 80 Business Days (approximately 4 calendar months) of completing the construction and installation of Dakota Electric's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, Dakota Electric shall provide the Interconnection Customer with a final accounting report, as described in the MN DIP-DEA 5.6.6.

#### 6.2. Milestones

Pursuant to the MN DIP-DEA 4.4.5, 5.6.2 and 5.6.3, the Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement.

#### 6.3. Financial Security Arrangements

Pursuant to the MN DIP-DEA 5.6.4, the Interconnection Customer shall provide Dakota Electric, at the Interconnection Customer's option, a guarantee, letter of credit or other form of security that is reasonably acceptable to Dakota Electric 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 Dakota Electric's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to Dakota Electric under this Agreement during its term. In addition:

- 6.3.1. The guarantee must be made by an entity that meets the creditworthiness requirements of Dakota Electric, and contain terms and conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.
- 6.3.2. The letter of credit must be issued by a financial institution or insurer reasonably acceptable to Dakota Electric and must specify a reasonable expiration date not sooner than sixty (60) Business Days (three calendar months) after the due date for the issuance of the final bill.

# 7. Article 7. Assignment, Liability, Non-Warranty, Indemnity, Force Majeure, Consequential Damages, and Default

#### 7.1. <u>Assignment</u>

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1. Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies Dakota Electric of any such assignment;
- 7.1.2. The Interconnection Customer shall have the right to assign this Agreement, without the consent of Dakota Electric, for collateral security purposes to aid in providing financing for the Distributed Energy Resource, provided that the Interconnection Customer will promptly notify Dakota Electric of any such assignment.
- 7.1.3. Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

#### 7.2. Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

#### 7.3. Non-Warranty

Dakota Electric does not give any warranty, expressed or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Interconnection Customer, including without limitation the Distributed Energy Resource and any structures, equipment, wires, appliances or devices not owned, operated or maintained by Dakota Electric.

#### 7.4. Indemnity

- 7.4.1. This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.
- 7.4.2. The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.
- 7.4.3. This is indemnification obligation shall apply notwithstanding any negligent or intentional acts, errors or omissions of the Indemnified Party, but the Indemnifying Party's liability to indemnify the Indemnified Party shall be reduced in proportion to the percentage by which the Indemnified Party's negligent or intentional acts, errors or omissions caused the damage.
- 7.4.4. Neither Party shall be indemnified for its damages resulting from its sole negligence, intentional acts or willful misconduct. These indemnity provisions shall not be construed to relieve any insurer of its obligation to pay claims consistent with the provisions of a valid insurance policy.
- 7.4.5. If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
- 7.4.6. If an indemnifying party is obligated to indemnify and hold any indemnified person harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.
- 7.4.7. Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification

obligation unless such failure or delay is materially prejudicial to the indemnifying party.

#### 7.5. Consequential Damages

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

#### 7.6. Force Majeure

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

#### 7.7. Default

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

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

#### 8. Article 8. Insurance

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

# 9. Article 9. Confidentiality

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

Procedures for Handling Trade Secret and Privileged Data, available online at: <a href="https://mn.gov/puc/puc-documents/#4">https://mn.gov/puc/puc-documents/#4</a>

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

without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

## 10. Article 10. Disputes

- 10.1. The Parties agree to attempt to resolve all disputes arising out of the interconnection process and associated study and interconnection agreements according to the provisions of this article and Minnesota Administrative Rules 7829.1500-7829.1900. More information on the Commission's Consumer Affairs Office dispute resolution services is available on the Commission's website: <a href="https://mn.gov/puc/consumers/help/complaint/">https://mn.gov/puc/consumers/help/complaint/</a>
- 10.2. Prior to a written Notice of Dispute, the Party shall contact the other Party and raise the issue and the relief sought in an attempt to resolve the issue immediately.
- 10.3. In the event of a dispute, the disputing Party shall provide the other Party a written Notice of Dispute containing the relevant known facts pertaining to the dispute, the specific dispute and the relief sought, and express notice by the disputing Party that it is invoking the procedures under this article. The Interconnection Customer may utilize the Commission's Consumer Affairs Office's complaint/inquiry form and Informal Complaint dispute resolution process to assist with the written Notice of Dispute. The notice shall be sent to the non-disputing Party's email address and physical address set forth in the interconnection agreement or Interconnection Application, if there is no interconnection agreement. If the Interconnection Customer chooses not to utilize the Commission's Consumer Affair Office dispute resolution process, the Interconnection Customer shall provide an informational electronic copy of the Notice of Dispute to the Consumer Affairs Office at the Commission at consumer.puc@state.mn.us.
- 10.4. The non-disputing Party shall acknowledge the notice within three (3) Business Days of its receipt and identify a representative with the authority to make decisions for the non-disputing Party with respect to the dispute.
- 10.5. The non-disputing Party shall provide the disputing Party with relevant regulatory and/or technical details and analysis regarding Dakota Electric interconnection requirements under dispute within ten (10) Business Days of the date of the Notice of Dispute. Within twenty (20) Business Days of the date of the Notice of Dispute, the Parties' authorized representatives will be required to meet and confer to try to resolve the dispute. Parties shall operate in good faith and use best efforts to resolve the dispute.

- 10.6. If a resolution is not reached in the thirty (30) Business Days from the date of the notice described in section 10.3, the Parties may 1) if mutually agreed, continue negotiations for up to an additional twenty (20) Business Days; or 2) either Party may request the Commission's Consumer Affairs Office provide mediation in an attempt to resolve the dispute within twenty (20) Business Days with the opportunity to extend this timeline upon mutual agreement. Alternatively, both Parties by mutual agreement may request mediation from an outside third-party mediator with costs to be shared equally between the Parties.
- 10.7. If the results of the mediation are not accepted by one or more Parties and there is still disagreement, the dispute shall proceed to the Commission's Formal Complaint process as described in Minn. Rules 7829.1700-1900 unless mutually agreed to continue with informal dispute resolution.
- 10.8. At any time, either Party may file a complaint before the Commission pursuant to Minn. Stat. §216B.164, if applicable, and Commission rules outlined in Minn. Rules Ch. 7829.

### 11. Article 11. Taxes

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

#### 12. Article 12. Miscellaneous

## 12.1. Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the Minnesota Public Utilities Commission and the laws of the state of Minnesota, without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

#### 12.2. Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties under the process described below, or under article 12.12 of this Agreement.

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

- 12.2.1. File a Petition with the Commission, or
- 12.2.2. File a Notice with the Commission of the proposed amendment. The Notice should include a copy of the amendment showing in redline format how the amendment would alter the MN DIA-DEA between Dakota Electric and Interconnection Customer for the Interconnection Application at issue. If no objection or notice of intent to object is filed within 30 days, then the proposed amendment would be considered to be approved by the Commission. If there is a timely filed objection of notice of intent to object, then the proposed amendment would not be considered to have been approved by the Commission and could only be used if the Commission subsequently issues a written order authorizing its use.
- 12.2.3. Commission approval of an amendment to the Interconnection Agreement is not needed where such an amendment only addresses updating or correcting: 1) information specified in the Interconnection Application; 2) exhibits or attachments to the Interconnection Agreement as long as they are not additional agreements or requirements not covered in the MN DIP-DEA or Minnesota Technical Requirements; or 3) information provided in the blank lines to the MN DIA-DEA or Uniform Statewide Contract forms.

#### 12.3. No Third-Party Beneficiaries

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

#### 12.4. Waiver

- 12.4.1. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 12.4.2. Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from Dakota Electric. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5. Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement. This Agreement can only be amended or modified in writing signed by both Parties.

#### 12.6. Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original, but all constitute one and the same instrument. Electronic signatures are acceptable if Dakota Electric has made such a determination pursuant to MN DIP-DEA 1.2.1.1.

#### 12.7. No Partnership

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

### 12.8. <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.

#### 12.9. Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cybersecurity practices.

#### 12.10. **Environmental Releases**

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Distributed Energy Resource or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11. **Subcontractors**

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

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

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

#### 12.12. Inclusion of Dakota Electric 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 Dakota Electric, which tariff schedules and rules are hereby incorporated into this Agreement by this reference. Notwithstanding any other provisions of this Agreement, Dakota Electric shall have the right to unilaterally file with the Minnesota Public Utilities Commission pursuant to the Commission's rules and regulations, an application for change in rates, charges, classification, service, tariff, or rule or any agreement relating thereto. The Interconnection Customer shall also have the right to unilaterally file with the Commission, pursuant to the Commission's rules and regulations, an application for change in rates, charges, classification, service, tariff, or rule or any agreement relating thereto. Each Party shall have the right to protest any such filing by the other Party and/or to participate fully in any proceeding before the Commission in which such modifications may be considered, pursuant to the Commission's rules and regulations.

#### Article 13. Notices 13.

#### 13.1. General

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

If to the Interco	nnection Customer:		
Interconnection (	Customer:		
Attention:			
Address:			
City:		State:	Zip:
Phone:	Email:		
If to Dakota Ele	ctric Association:		
Dakota Electric A	Association		
Attention: Genera	ation Interconnection Co	ordinator	
Address: 4300 22	20 <sup>th</sup> St West		
City: Farmington	State: MN Zip: 5502	24	
Phone: (651) 463	-6261 Email:		
Billing and Payme Billings and paym	ent ents shall be sent to the a	addresses set c	out below:
Interconnection	Customer:		
Attention:			
Address:			
City:	St	ate:	7in·

T 1 4	T 4 •	• 4•
Dakota	HIRCTRIC	Association
Danota	Licture	Association

Attention: Generation Interconnection Coordinator

Address: 4300 220th St West

City: Farmington State: MN Zip: 55024

#### 13.3. Alternative Forms of Notice

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

#### If to the Interconnection Customer:

Interconnection Customer: _		 
Attention:		 
Address:		
City:		
Phone:	Email:	 

#### If to Dakota Electric Association:

Dakota Electric Association

Attention: Generation Interconnection Coordinator

Address: 4300 220th St West

City: Farmington State: MN Zip:55024

Phone: (651) 463-6261 Email: \_\_\_\_\_

### 13.4. Designated Operating Representative

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

# **Interconnection Customer's Operating Representative:** Interconnection Customer: Attention: City: \_\_\_\_\_ State: \_\_\_\_ Zip:\_\_\_\_ Phone: \_\_\_\_\_ Email: \_\_\_\_\_ **Dakota Electric Association's Operating Representative:** Dakota Electric Association Attention: Generation Interconnection Coordinator Address: 4300 220th St West City: Farmington State: MN Zip:55024 Phone: (651) 463-6261 Email: \_\_\_\_\_ Changes to the Notice Information Either Party may change this information by giving five Business Days written

## 13.5.

notice to the other Party prior to the effective date of the change.

## 14. Article 14. Signatures

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

## For Dakota Electric Association

Name:		
	(Print Name)	
Title:		
Date:		
ne Interconnec	tion Customer	
ne Interconnec	tion Customer	
	tion Customer	
Signature:	tion Customer	
Signature: Name:	(Print Name)	
Signature:		

## Attachment 1: Glossary of Terms

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

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

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

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

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

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

**Confidential Information** – See MN DIA-DEA Article 9.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**MN DIA-DEA -** The Dakota Electric Association version of the Minnesota Distributed Energy Resource Interconnection Agreement. See MN DIP-DEA Section 1.1.5 for when the Uniform Statewide Contract or MN DIA-DEA applies.

**MN DIP-DEA** – The Dakota Electric Association version of the Minnesota Distributed Energy Resource Interconnection Process outline the statewide interconnection standards.

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

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

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

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

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

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.

**Party or Parties** – Dakota Electric Association 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.

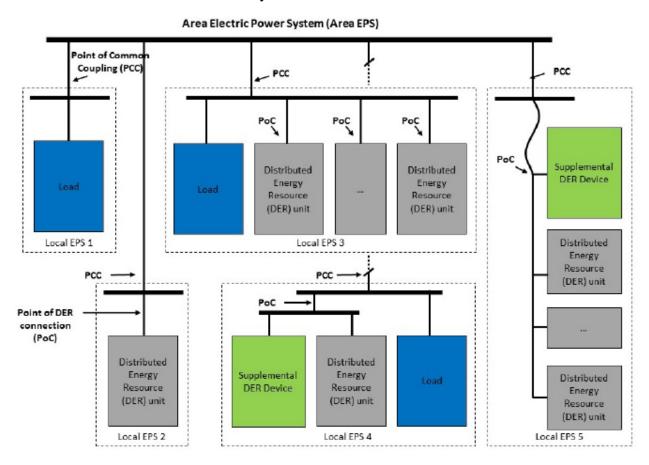


Figure 1: Point of Common Coupling and Point of DER Connection

(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 MN DIP-DEA sections 1.5.2 and 1.8.

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

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

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

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

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

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

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

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

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

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

# Attachment 2: Description and Costs of the Distributed Energy Resource, Interconnection Facilities, and Metering Equipment

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

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

A description of the Generation System, including a single-line diagram showing the general arrangement of how the Interconnection Member's Generation System is interconnected with Dakota Electric's distribution system. At a minimum the single-line diagram shows the following;

- 1) Electrical relationship of Interconnection Facilities to each other
- 2) Point of Common Coupling (PCC)
- 3) Point of DER Connection (PoC)
- 4) Location of meter(s)
- 5) Equipment ownership

## Attachment 4: Milestones

The Milestone in line (1) below may be a calendar date. All other dates in this Attachment 4 may be number of Business Days from the calendar date in line (1) or from the completion of a different Milestone described in a specified line number. Similarly, the anticipated In-Service Date may be based on the number of Business Days from the completion of a specified line number. In-Service Date: Critical milestones and responsibility as agreed to by the Parties: Milestone/Anticipated Date **Responsible Party** (1) (2) (3) (4) (5) (6) (7) (8) (9) (10)Agreed to by: For Dakota Electric \_\_\_\_\_ Date\_\_\_\_\_

For the Transmission Owner (If Applicable) \_\_\_\_\_\_ Date\_\_\_\_\_

For the Interconnection Customer\_\_\_\_\_\_ Date\_\_\_\_\_

# Attachment 5: Additional Operating and Maintenance Requirements for Dakota Electric's Distribution System and Affected Systems Needed to Support the Interconnection Customer's Needs

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

# Attachment 6: Dakota Electric's Description of Distribution and Network Upgrades and Good Faith Estimates of Upgrade Costs

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

# Attachment 7: Assignment of Minnesota Distributed Energy Resource Interconnection Agreement (MN DIA-DEA)

This is an Assignment of Interconnection Agreement ("Assignment").

There is an Interconnection Agreement, including any and all Attachments thereto including any and all amendments ("Agreement") by and between Dakota Electric Association ("Dakota Electric""), having its principal office and place of business located at 4300 220<sup>th</sup> Street W, Farmington, Minnesota, 55024, and [insert name of current party to the Interconnection Agreement] ("Assignor"), originally signed by Dakota Electric on [insert date of signature to Interconnection Agreement by Dakota Electric] for a Distributed Energy Resource (DER) with a Nameplate Rating of \_\_\_\_ kW (AC) located at [insert address].

The Assignor intends to convey its interest in the above-referenced DER to [insert name of new purchaser of the service address shown in Interconnection Application and in one line diagram attached to Agreement] ("Assignee"), and the Assignor intends to assign the Agreement to the Assignee.

Upon the execution of this Assignment by the Assignor, Assignee and Dakota Electric, 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**. Dakota Electric 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 Dakota Electric under the Agreement to either the Assignor or the Assignee shall be deemed to have been made to both and shall discharge Dakota Electric 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 Dakota Electric, occurring or accruing under the Agreement on or before the date of the signature of Dakota Electric to this Assignment shall be deemed to be the obligation of both the Assignor and Assignee, and Dakota Electric 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 3 of the Agreement, and in Articles 13.1, 13.2, 13.3, and 13.4 of the Agreement.

Page 3	Interconnection Customer:	
	Attention:	
	Address:	
	City: State:	Zip:
	Phone: Email:	
Article 13.1	Interconnection Customer:	
General	Attention:	
	Address:	
	City: State: _	Zip:
	Phone: Email:	
Article 13.2	Interconnection Customer:	
Billing and	Attention:	
Payment	Address:	
	City: State:	Zip:
Article 13.3	Interconnection Customer:	
Alternative	Attention:	
Forms of	Address:	
Notice	City: State:	
	Phone: Email:	
Article 13.4	Interconnection Customer's Operating Represer	ntative.
Designated	and the second of the second o	
Operating	Interconnection Customer:	
Representative	Attention:	
ziopi osoniumi (	Address:	
	City: State:	Zip:
	Phone: Email:	

7. <b>Signatures.</b> 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.
Dakota Electric, Assignor, and Assignee have executed this Assignment as of the
dates as set forth below.
Assignor (include name of legal entity)
Signature:
Name:
Title:
Date:
Dakota Electric Association
Signature:
Name:
Title:
Date:
Assignee (include name of legal entity)
Signature:
Name:
Title:
Date:

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Ross	Abbey	ross.abbey@us-solar.com	United States Solar Corp.	100 North 6th St Ste 222C  Minneapolis, MN 55403	Electronic Service	No	OFF_SL_18-711_M-18-711
Michael	Allen	michael.allen@allenergysol ar.com	All Energy Solar	721 W 26th st Suite 211  Minneapolis, Minnesota 55405	Electronic Service	No	OFF_SL_18-711_M-18-711
David	Amster Olzweski	david@mysunshare.com	SunShare, LLC	1774 Platte St  Denver, CO 80202	Electronic Service	No	OFF_SL_18-711_M-18-711
Janet	Anderson	jainstp@q.com	-	1799 Sargent St. Paul, MN 55105	Electronic Service	No	OFF_SL_18-711_M-18-711
Christopher	Anderson	canderson@allete.com	Minnesota Power	30 W Superior St  Duluth, MN 558022191	Electronic Service	No	OFF_SL_18-711_M-18-711
Mark	Anderson	manderson@southcentralel ectric.com	South Central Electric Association	PO Box 150 71176 Tiell Drive St. James, MN 56081	Electronic Service	No	OFF_SL_18-711_M-18-711
Christine	Andrews	christineandrewsjd@gmail.		792 Goodrich Ave St Paul, Minnesota 55105	Electronic Service	No	OFF_SL_18-711_M-18-711
Alison C	Archer	aarcher@misoenergy.org	MISO	2985 Ames Crossing Rd  Eagan, MN 55121	Electronic Service	No	OFF_SL_18-711_M-18-711
John	Bailey	bailey@ilsr.org	Institute For Local Self- Reliance	1313 5th St SE Ste 303  Minneapolis, MN 55414	Electronic Service	No	OFF_SL_18-711_M-18-711
Sara	Baldwin Auck	sarab@irecusa.org	Interstate Renewable Energy Council, Inc.	PO Box 1156 Latham, NY 12110	Electronic Service	No	OFF_SL_18-711_M-18-711

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Laura	Beaton	beaton@smwlaw.com	Shute, Mihaly & Weinberger LLP	396 Hayes Street  San Francisco, CA 94102	Electronic Service	No	OFF_SL_18-711_M-18-71
Peter	Beithon	pbeithon@otpco.com	Otter Tail Power Company	P.O. Box 496 215 South Cascade S Fergus Falls, MN 565380496	Electronic Service treet	No	OFF_SL_18-711_M-18-711
Sara	Bergan	sebergan@stoel.com	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_18-711_M-18-711
Derek	Bertsch	derek.bertsch@mrenergy.c om	Missouri River Energy Services	3724 West Avera Drive PO Box 88920 Sioux Falls, SD 57109-8920	Electronic Service	No	OFF_SL_18-711_M-18-711
William	Black	bblack@mmua.org	MMUA	Suite 400 3025 Harbor Lane Noi Plymouth, MN 554475142	Electronic Service th	No	OFF_SL_18-711_M-18-711
Becky	Bradburn	b.bradburn@bcrea.coop	Brown County Rural Electric Assn.	PO Box 529 Sleepy Eye, MN 56085	Electronic Service	No	OFF_SL_18-711_M-18-711
Kenneth	Bradley	kbradley1965@gmail.com		2837 Emerson Ave S Apt CW112 Minneapolis, MN 55408	Electronic Service	No	OFF_SL_18-711_M-18-711
Jon	Brekke	jbrekke@grenergy.com	Great River Energy	12300 Elm Creek Boulevard Maple Grove, MN 553694718	Electronic Service	No	OFF_SL_18-711_M-18-711
Kathleen M.	Brennan	kmb@mcgrannshea.com	McGrann Shea Carnival, Straughn & Lamb, Chartered	800 Nicollet Mall Ste 2600  Minneapolis, MN 554027035	Electronic Service	No	OFF_SL_18-711_M-18-711

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron	200 S 6th St Ste 4000  Minneapolis, MN 554021425	Electronic Service	No	OFF_SL_18-711_M-18-711
Michael J.	Bull	mbull@mncee.org	Center for Energy and Environment	212 Third Ave N Ste 560  Minneapolis, MN 55401	Electronic Service	No	OFF_SL_18-711_M-18-711
Jessica	Burdette	jessica.burdette@state.mn. us	Department of Commerce	85 7th Place East Suite 500 St. Paul, MN 55101	Electronic Service	No	OFF_SL_18-711_M-18-711
Douglas M.	Carnival	dmc@mcgrannshea.com	McGrann Shea Carnival Straughn & Lamb	N/A	Electronic Service	No	OFF_SL_18-711_M-18-711
Pat	Carruth	pat@mnvalleyrec.com	Minnesota Valley Coop. Light & Power Assn.	501 S 1st St. PO Box 248 Montevideo, MN 56265	Electronic Service	No	OFF_SL_18-711_M-18-711
Kenneth A.	Colburn	kcolburn@symbioticstrategi es.com	Symbiotic Strategies, LLC	26 Winton Road  Meredith, NH 32535413	Electronic Service	No	OFF_SL_18-711_M-18-711
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.st ate.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_18-711_M-18-711
Curtis	Cordt	ccordt@mvec.net	Minnesota Valley Electric Cooperative	125 Minnesota Valley Electric Drive Jordan, MN 55352	Electronic Service	No	OFF_SL_18-711_M-18-711
George	Crocker	gwillc@nawo.org	North American Water Office	PO Box 174  Lake Elmo, MN 55042	Electronic Service	No	OFF_SL_18-711_M-18-711

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Art	Crowell	acrowell@sundialsolarener gy.com	Sundial Solar	not provided	Electronic Service	No	OFF_SL_18-711_M-18-711
Stacy	Dahl	sdahl@minnkota.com	Minnkota Power Cooperative, Inc.	5301 32nd Ave S  Grand Forks, ND 58201	Electronic Service	No	OFF_SL_18-711_M-18-711
David	Dahlberg	davedahlberg@nweco.com	Northwestern Wisconsin Electric Company	P.O. Box 9 104 South Pine Street Grantsburg, WI 548400009	Electronic Service	No	OFF_SL_18-711_M-18-711
Patrick	Dalton	patrick.l.dalton@xcelenergy .com	Xcel Energy	N/A	Electronic Service	No	OFF_SL_18-711_M-18-711
Lisa	Daniels	lisadaniels@windustry.org	Windustry	201 Ridgewood Ave  Minneapolis, MN 55403	Electronic Service	No	OFF_SL_18-711_M-18-711
James	Darabi	james.darabi@solarfarm.co m	Solar Farm, LLC	2355 Fairview Ave #101  St. Paul,  MN  55113	Electronic Service	No	OFF_SL_18-711_M-18-711
James	Denniston	james.r.denniston@xcelen ergy.com	Xcel Energy Services, Inc.	414 Nicollet Mall, Fifth Floor Minneapolis, MN 55401	Electronic Service	No	OFF_SL_18-711_M-18-711
Curt	Dieren	curt.dieren@dgr.com	L&O Power Cooperative	1302 S Union St Rock Rapids, IA 51246	Electronic Service	No	OFF_SL_18-711_M-18-711
Cheryl	Dietrich	cheryl.dietrich@nexteraene rgy.com	NextEra Energy Resources, LLC	700 Universe Blvd E1W/JB  Juno Beach, FL 33408	Electronic Service	No	OFF_SL_18-711_M-18-711

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Robin	Doege	Rdoege@stearnselectric.or g	Stearns Electric Association	900 Kraft Dr SE  Melrose, MN 56352	Electronic Service	No	OFF_SL_18-711_M-18-711
Robin	Doege	rdoege@toddwadena.coop	Todd Wadena Electric Cooperative	550 Ash Ave NE Wadena, MN 56482	Electronic Service	No	OFF_SL_18-711_M-18-711
Kristin	Dolan	kdolan@meeker.coop	Meeker Cooperative Light & Power Assn	1725 US Hwy 12 E. Ste 100 Litchfield, MN 55355	Electronic Service	No	OFF_SL_18-711_M-18-711
Steve	Downer	sdowner@mmua.org	MMUA	3025 Harbor Ln N Ste 400  Plymouth,  MN  554475142	Electronic Service	No	OFF_SL_18-711_M-18-711
Renee	Doyle		Doyle Electric Inc.	PO Box 295 Amboy, MN 56010	Paper Service	No	OFF_SL_18-711_M-18-711
Kelly	Dybdahl	kdybdahl@llec.coop	Lyon-Lincoln Electric Cooperative, Inc.	205 W. Hwy. 14 Tyler, MN 56178	Electronic Service	No	OFF_SL_18-711_M-18-711
Kristen	Eide Tollefson	healingsystems69@gmail.c om	R-CURE	28477 N Lake Ave Frontenac, MN 55026-1044	Electronic Service	No	OFF_SL_18-711_M-18-711
R. Neal	Elliot		American Council for an	Energy-Efficient Economy 529 14th Street, NW, 600 Washington, DC 20045	Paper Service Suite	No	OFF_SL_18-711_M-18-711

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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Marcia	Solie	m.solie@bcrea.coop	Brown County Rural Electric Assn.	24386 State Hwy. 4, PO Box 529  Sleepy Eye, Minnesota 56085	Electronic Service	No	OFF_SL_18-711_M-18-711
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Mike	Steckelberg	msteckelberg@grenergy.co m	Great River Energy	12300 Elm Creek Boulevard Maple Grove, MN 553694718	Electronic Service	No	OFF_SL_18-711_M-18-711
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Eric	Swanson	eswanson@winthrop.com	Winthrop & Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	OFF_SL_18-711_M-18-711
Sherry	Swanson	sswanson@noblesce.com	Nobles Cooperative Electric	22636 US Highway 59 PO Box 788 Worthington, MN 56187	Electronic Service	No	OFF_SL_18-711_M-18-711

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Pat	Treseler	pat.jcplaw@comcast.net	Paulson Law Office LTD	4445 W 77th Street Suite 224 Edina, MN 55435	Electronic Service	No	OFF_SL_18-711_M-18-711
Jeff	Triplett	triplettj@powersystem.org	MREA	10710 Town Square Dr NW St 201 Minneapolis, MN 55449	Electronic Service	No	OFF_SL_18-711_M-18-711
Adam	Tromblay	atromblay@noblesce.com	Nobles Cooperative Electric	22636 US Hwy. 59 P.O. Box 788 Worthington, MN 56187-0788	Electronic Service	No	OFF_SL_18-711_M-18-711
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Craig	Turner	cturner@dakotaelectric.co m	Dakota Electric Association	4300 - 220th Street West Farmington, MN 550249583	Electronic Service	No	OFF_SL_18-711_M-18-711

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Terry	Wolf	terry.wolf@mrenergy.com	Missouri River Energy Services	3724 W Avera Dr PO Box Sioux Falls, SD 571098920	Electronic Service	No	OFF_SL_18-711_M-18-711
Thomas J.	Zaremba	TZaremba@wheelerlaw.co	WHEELER, VAN SICKLE & ANDERSON	44 E. Mifflin Street, 10th Floor Madison, WI 53703	Electronic Service	No	OFF_SL_18-711_M-18-711