Nodak Electric Cooperative Interconnection Process

Distributed Energy Resource Interconnection Process for Systems Less than 10 MW.

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Contents

Foreword

Nodak Electric Cooperative has an Interconnection Process standard in effect to address the interconnection of distributed energy resources (DER) to the distribution grid. The Nodak Electric Cooperative Interconnection Process for Distributed Energy Resources (Interconnection Process) applies to any DER no larger than 10-megawatt (MW) AC interconnecting to and operating in parallel with Nodak Electric Cooperative's distribution system in North Dakota. This interconnection process document is designed to be member-centric when explaining the steps and details to interconnect DER systems to the distribution grid.

This Interconnection Process includes DER types such as solar systems, energy storage batteries and wind systems along with fossil fuel generators and electric vehicles that may be used for emergency power. For the safety of the Cooperative's personnel and the public, it is important for cooperative members to communicate with the Cooperative regarding the installation of all types of DERs.

The process to interconnect a DER system to the distribution grid starts with the submission of an Interconnection Application. Depending on the type and size of the DER system, the Interconnection Application will fall under one of three tracks. Each track has different information required in the application; and non-refundable interconnection application fees will vary. Both the electric utility and the Interconnection Customer have timelines that are enforced to ensure a timely application review, contract execution and interconnection commissioning.

The key to a successful interconnection of a DER system is communication between all parties. Timely submission of the Interconnection Application prior to the purchase and installation of a DER system is strongly recommended. The Cooperative encourages members to ask questions throughout the Interconnection Process.

1 Key Terminology

1.1. Distributed Energy Resource

Distributed Energy Resources (DER) was often referred in past Interconnection Processes as Distributed Generation (DG) and on occasion also interchanged with the term Qualifying Facility (QF). This Interconnection Process uses the term DER to address all types of generation and energy resources that can be interconnected to the electric distribution system. DER technologies can include photovoltaic solar systems, wind turbines, storage batteries, electric vehicles or fossil fuel generators and are not limited to renewable types of technologies.

1.2. Point of Coupling/Connection

DER systems often reside behind the utility's revenue meter of a residence or business. The meter is normally the point of demarcation between the utility-owned equipment and the customer-owned equipment. The term Point of Common Coupling (PCC) is the demarcation location between the utility and the customer.

The Point of DER Connection (PoC) can be different from the PCC. The PoC is the location where a DER system(s) would interconnect to the electrical system normally owned by the customer. For example, the PoC for a rooftop photovoltaic solar system may be the main electrical panel in a member's home.

1.3. Capacity

Throughout the Interconnection Process will be references to capacity of the DER system. In most cases, the capacity listed is referring to the Nameplate Capacity of the DER system. All capacity reference will be in alternating current (AC).

There can be multiple DER systems with different PoCs that all have the same PCC submitted on a single Interconnection Application. The capacity for this type of interconnection would be the aggregate Nameplate Capacity of all DER systems at the individual PoCs. Additional examples of DER system arrangements can be seen in Section 18 under the definition of Point of Common Coupling.

2 Roles

2.1. Overview

During the Interconnection Process for a proposed DER system, there are multiple entities involved in the application, approval and commissioning processes. The main entities that are involved during the Interconnection Process for a proposed DER system are the Interconnection Customer, the Application Agent and the DER Interconnection Coordinator. Official definitions of each entity are defined in the Glossary (Section 18). Additional details are explained in the subsections following.

2.2. DER Interconnection Coordinator

The utility is referred to as the Area Electric Power Supply Operator in this Interconnection Process. Nodak Electric shall designate a DER Interconnection Coordinator(s) to serve as a single point of contact from which general information on the application process may be obtained. The DER Interconnection Coordinator shall be available to provide coordination 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.

The contact information of the DER Interconnection Coordinator will be posted on Nodak Electric's website when feasible.

2.3. Interconnection Customer

The owner of the proposed DER system and the entity requesting interconnection to the distribution system.

2.4. Application Agent

The Interconnection Customer may designate, on the Interconnection Application or in writing after the application has been submitted, an Application Agent to serve as a 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 application documents and the responsibilities outlined in the Interconnection Process or in interconnection agreements. DER vendors, project managers or electricians are common entities that the Interconnection Customer may designate to perform this role.

2.5. Engineering Roles

Either party may designate a specific person to be a single point of contact to provide technical expertise during the Interconnection Process for their organization. The person to supply engineering expertise may be a third party such as an engineering consultant or manufacturer's engineer.

3 Know Before Applying for Interconnection

3.1. Overview

This Interconnection Process applies to any DER no larger than 10 MW AC interconnecting to and operating in parallel with Nodak Electric's distribution system. Interested parties with plans to interconnect DER systems larger than 10 MW AC to the distribution system should contact the Cooperative for the specific Interconnection Process. Federal Energy Regulatory Commission's (FERC) Interconnection Process will supersede any Interconnection Process Nodak Electric has for DER system interconnections that fall under the jurisdiction of FERC.

The Interconnection Process for DER is broken into three different tracks; Tier I, Tier II, and Tier III. The general classification of each track is summarized in Table 1.

Table 1. Interconnection Process Tracks

Track	DER Technology	Size Limitations
Tier I	Certified Inverter Only	20kW AC
Tier II	Standby Systems Only	10 MW AC
Tier III	All Other Types	10 MW AC

3.2. Importance of Process Timelines

It is very important to pay attention to timelines listed for each process track step. The timelines exist for an orderly and efficient process to interconnect DER systems to the Distribution System. If a timeline is missed by an Interconnection Customer, without the Interconnection Customer requesting a Timeline Extension explained in Section 14, the Interconnection Application will be deemed withdrawn by Nodak Electric.

Nodak Electric also needs to abide to the timelines listed for each process track. The process for Nodak Electric to request a Timeline Extension is also addressed in Section 14.

Unless otherwise stated, all time frames are measured in Business Days. For purpose of measuring these time intervals, the time shall be computed so as to exclude the first and include the last day of the prescribed duration of time. Any communication sent or received after 4:30 p.m. Central Prevailing Time or on a Saturday, Sunday or Holiday shall be considered to be sent on the next Business Day.

3.3. Process Assistance

Prior to submitting an Interconnection Application, the Interconnection Customer may request assistance from Nodak Electric with navigating the Interconnection Process. In lieu of requesting specific information related to technical capabilities of the distribution system prior to the submission of an Interconnection Application, a Site Summary Request may be submitted. The Site Summary Requests and the information in the Site Summary Report are detailed in Section 15. Proposed DER systems sized larger than 150kW AC are encouraged to submit a Site Summary Request.

3.4. Technical Requirements

The Interconnection Customer's proposed DER must meet the codes, standards and certification requirements listed in Nodak Electric's Technical Requirements. Nodak Electric may allow DER systems that do not meet codes, standards and certification only if the DER system design is reviewed, tested and determined that it is safe to operate in parallel with the distribution system.

4 Tracks

4.1. Tier I

The Tier I track applies to an Interconnection Application to interconnect a certified, inverter-based DER system no larger than 20 kilowatts (kW). A certified inverter will have certification of meeting the current version of the IEEE standard 1547. A common inverter certification is UL 1741[1]. Note that certified inverters may still need to have a setting adjusted to meet the Technical Requirements of Nodak Electric. Tier I track eligibility does not imply or indicate the Interconnection Application will pass the initial review or engineering screens.

4.2. Tier II

The Tier II track applies to an Interconnection Application to interconnect a standby DER system no larger than 10 MW. A standby DER system will not operate in extended parallel/continuous with the distribution system. Instead, a standby DER system may utilize a transfer switch to disconnect the electric service from the distribution system while the DER system is operating. Acceptable transfer mode includes Open Transition (Break-Before-Make), Limited Quick Close (Make-Before-Break 100 msec or less) or Limited Parallel (Make-Before-Break two minutes or less). Additional information regarding acceptable transfer modes is explained in Nodak Electric's Technical Requirements.

Backup fossil fuel generators and energy storage batteries utilized in an emergency are the most common type of a Tier II interconnection.

4.3. Tier III

The Tier III track applies to an Interconnection Application to interconnect all other types of DER systems no larger than 10 MW that operate in extended parallel/continuous with the distribution system and do not fall under the Tier I or Tier II tracks.

5 Capacity of the Distributed Energy Resources

5.1. Capacity Limit

The capacity is determined by the aggregated summation of the Nameplate Rating listed in alternating current (AC) of all components that make up the DER system

[1] The Technical Requirements will call for inverters to meet UL 1741-SB. Not all inverters will be able to meet this certification. Nodak Electric will work with the Interconnection Customer to address exception in certification until inverters with UL 1741-SB certification are readily available.

interconnected at a specific metering point.[2] The capacity and type of DER system determines which process track the application falls under.

5.2. Existing DER System Expansion

If the Interconnection Application is for an increase in capacity to an existing DER system, the Interconnection Application shall be evaluated on the basis of the total new alternating current (AC) capacity of the DER. The maximum capacity for the DER shall be the aggregate maximum Nameplate Rating.[3]

5.3. New DER Systems

An Interconnection Application for a DER that includes a single or multiple energy production devices, (i.e. solar and storage), at a site for which the Interconnection Customer seeks a Point of Common Coupling, shall be evaluated on the basis of the aggregated maximum Nameplate Rating.

6 Interconnection Applications

6.1. Overview

A separate Interconnection Application is required for every DER system with a distinct Point of Common Coupling. This may mean multiple Interconnection Application submissions are required if multiple DER systems are proposed to be interconnected on separate electric services that may be on the same property.

Each process track has different information that needs to be provided to Nodak Electric. Nodak Electric will provide all necessary Interconnection Applications, Interconnection Process documents and sample interconnection agreements on its website if possible. If a website is not available, the applicable documents will be readily available at Nodak Electric's main office.

Nodak Electric will also accept Interconnection Applications submitted electronically either through a web portal or to an email address specified by Nodak Electric. Nodak Electric may allow the Interconnection Application to be submitted with an electronic signature.

6.2. Interconnection Application Process Fees

Each Interconnection Application submitted to Nodak Electric must include the appropriate Interconnection Application process fee prior to Nodak Electric reviewing

[2] For DER systems that have different DER Units and are DC coupled, sharing a common inverter, the DER system maximum capacity size is the inverter rating. For example, a 10 KW AC inverter that is DC connected to both a 10 kW solar system and a 5 KW energy storage system has the maximum capacity size of 10 kW AC.

[3] Example: An existing 10 kW AC solar system is interconnected to a home. Three years later a 5 kW AC energy storage system is also interconnected to the same electric service for the home but with a separate inverter. The second Interconnection Application would be for an additional 5 kW AC of capacity but the aggregate nameplate capacity of the DER systems would be 15 kW AC.

the Interconnection Application. The maximum amount of the required process fee for each process track is listed in Table 2.

Table 2. Interconnection Application Process Fee

Track	DER Technology	Maximum Process Fee
Tier I	Certified Inverter Only	$250
Tier II	Standby Systems Only	No Charge
Tier III	All Other Types	$500

6.3. Requirements for a Complete Interconnection Application

A completed Interconnection Application will include the following:

- A completed Interconnection Application for the appropriate process track signed by the Interconnection Customer.
- A non-refundable process fee indicated in Table 2.
- A site layout drawing of the proposed DER system.
- A one-line diagram of the proposed DER system showing the point of common coupling to Nodak Electric's distribution system, the point of interconnection and the reference point of applicability.
- All equipment manufacturer specification sheets.
- Documentation of site control indicated in Section 6.4.

Additional documentation may be required for specific process tracks.

6.4. Site Control

Documentation of site control must be submitted with the Interconnection Application. Site control may be demonstrated by any of the following:

- Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the DER system.
- An option to purchase or acquire a leasehold site for constructing the DER system.
- 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 constructing the DER system.

For DER applying under the Tier I process track, proof of site control may be demonstrated by the site owner's signature on the Interconnection Application.

7 Application Review

7.1. Timelines

The Interconnection Application shall be date- and time-stamped upon initial receipt. Nodak Electric has a total of twenty-five (25) Business Days to complete the Interconnection Application review and submit notice back to the Interconnection Customer stating the proposed DER system may proceed with the Interconnection Process or if additional engineering studies are needed prior to approving the Interconnection Application. The duration period waiting for the Interconnection Customer to provide missing information is not included in Nodak Electric's twenty-five (25) Business Days review timeline.

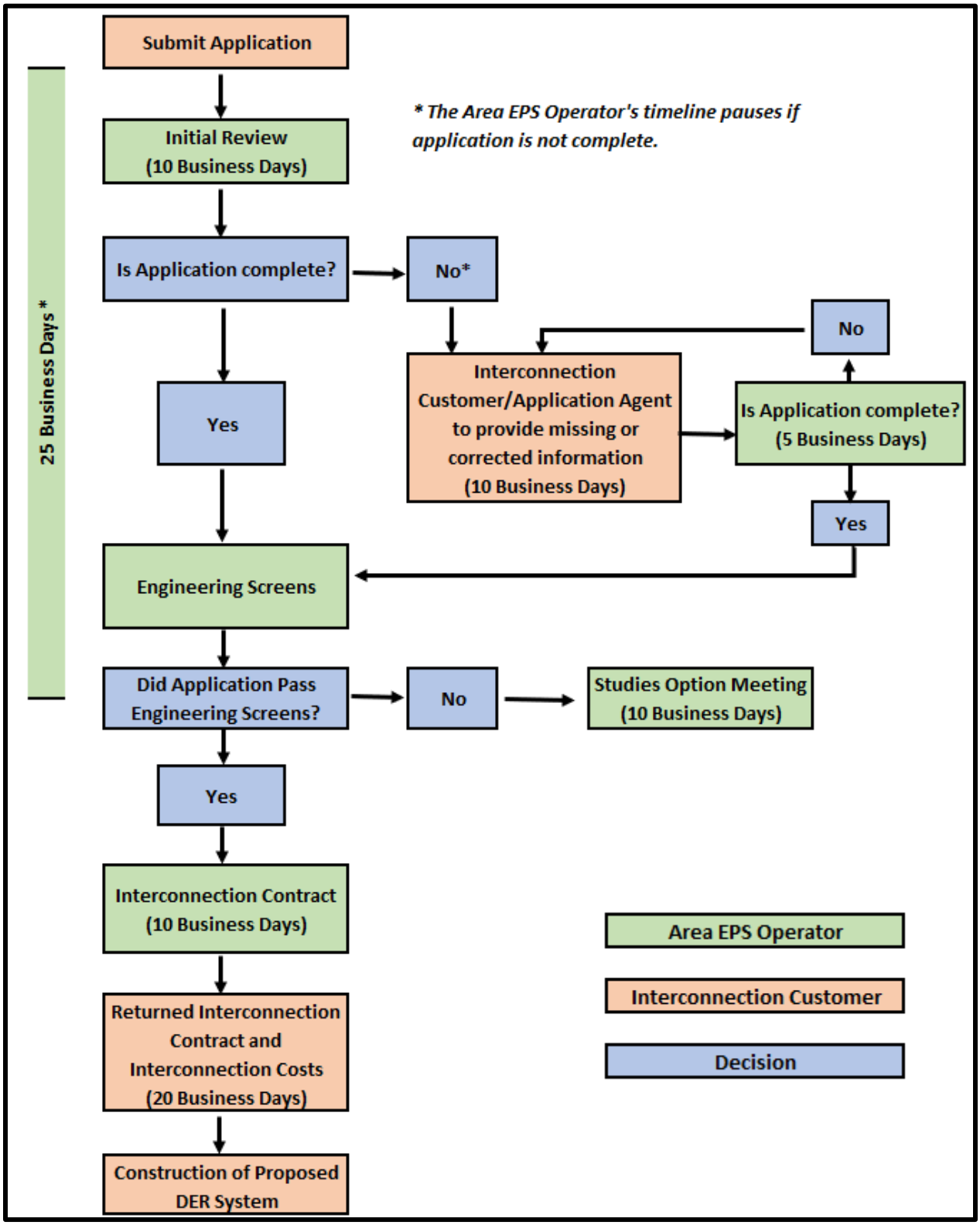
7.2. Initial Review

The Interconnection Customer shall be notified of receipt by Nodak Electric within ten (10) Business Days of receipt of the Interconnection Application. Nodak Electric shall begin the Initial Review of each submitted Interconnection Application in the order that it is received for completeness.

Nodak Electric shall also notify the Interconnection Customer if the Interconnection Application is deemed incomplete within ten (10) Business Days of receipt of an Interconnection Application and provide a written list detailing all information that must be provided to complete the Interconnection Application. The Interconnection Customer has ten (10) Business Days to provide the missing information unless additional time is requested with valid reasons. Failure to submit the requested information within the stated timeline will deem the Interconnection Application withdrawn. Nodak Electric has an additional five (5) Business Days to review the additionally provided information for completeness.

An Interconnection Application will be deemed complete once Nodak Electric has confirmed all documents, fees and information required with the Interconnection Application, adhering to Nodak Electric's Technical Requirements, were provided.

Figure 1 Interconnection Process Flow Chart



7.3. Queue Position

Nodak Electric shall maintain a single, administrative queue and may manage the queue by geographical region. The Queue Position is determined by the time- and date- stamp when the Interconnection Application passed the Initial Review described in Section 7.2. The queue position is also used to determine the cost responsibility for system Upgrades necessary to accommodate the interconnection.

An Interconnection Application will retain its queue number even if it is required to have studies performed prior to approval of the Interconnection Application. An Interconnection Application can lose its Queue Position if the Interconnection Customer misses timelines in the applicable process track. The Interconnection Customer and Nodak Electric have the opportunity to request timeline extensions which are explained in detail in Section 14.

7.4. Initial Engineering Screens

Nodak Electric shall determine if the DER can be interconnected safely and reliably without the construction of facilities by Nodak Electric and by using a set of Initial Engineering Screens. The Initial Engineering Screens include the following engineering screens:

- The proposed DER's Point of Common Coupling must be on a portion of Nodak Electric's distribution system.

- 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 or 100% of the substation aggregated minimum load. A line section is that portion of Nodak Electric's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line. Nodak Electric may consider 100% of applicable loading (i.e. daytime minimum load for solar), if available, instead of 15% of line section peak load.

- 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 50kW.[4]

[4] 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.

- 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.

- 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.

- Using the Table 3, 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 Nodak Electric's electric power system due to a loss of ground during the operating time of any anti-islanding function.

Table 3. Type of Primary Distribution Line Interconnections

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Results
Three-Phase, three wire	Three-phase or single-phase, phase-to-phase	Pass Screen
Three-phase, four wire	Effectively-grounded three-phase or single-phase, line-to-neutral	Pass Screen

- 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 20kW or 65% of the transformer nameplate rating.

- 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.

The technical screens listed shall not preclude Nodak Electric from using tools that perform screening functions using different methodologies provided the analysis is targeted to maintain the voltage, thermal and protection objectives as the listed screen.

7.5. Notification of Approval of Application

Provided the Interconnection Application passes the initial engineering screens, or if the proposed interconnection fails the screens but Nodak Electric determines that the DER may, nevertheless, be interconnected consistent with safety, reliability and power quality standards, Nodak Electric shall provide notice to the Interconnection Customer that their Interconnection Application has been approved. Nodak Electric shall provide the Interconnection Customer with an Interconnection Agreement as outlined in Section 10.

7.6. Failure of Initial Engineering Screens

If the proposed interconnection fails the initial engineering screens, and Nodak 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, Nodak Electric shall provide the Interconnection Customer the opportunity to attend a Studies Options Meeting.

7.7. Studies Options Meeting

Within ten (10) Business Days of Nodak Electric's notification to the Interconnection Customer of the proposed interconnection's failure of the initial engineering screens, Nodak Electric and the Interconnection Customer shall schedule a Studies Options Meeting to review possible DER modification, screen analysis and related results to determine what further steps are needed to permit the DER to be interconnected safely and reliably to the distribution system. At the Studies Options Meeting Nodak Electric shall:

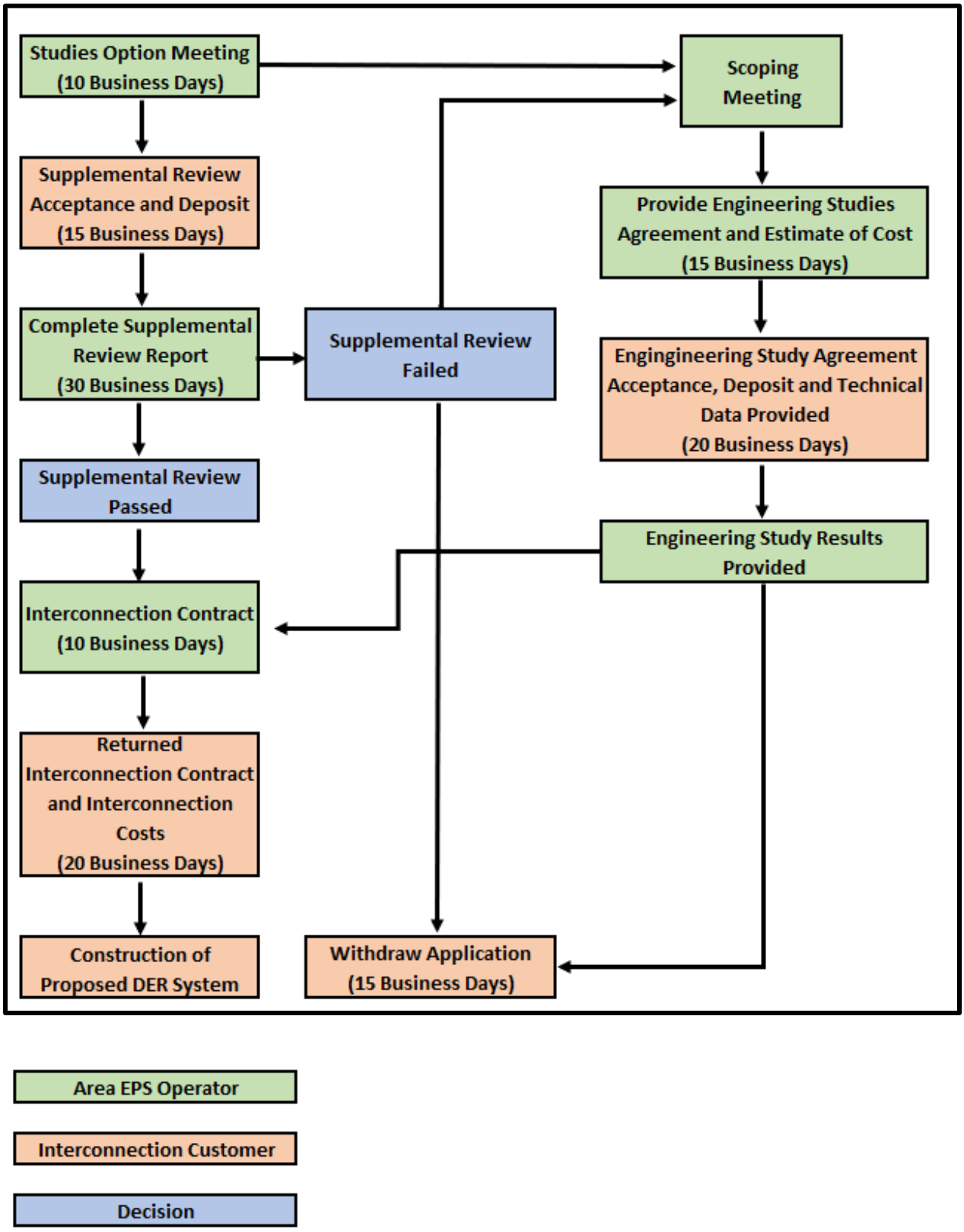
- Offer to perform a Supplemental Review in accordance with Section 8 and provide a non-binding good faith estimate of the cost of such review; or

- Obtain the Interconnection Customer's agreement to continue evaluating the Interconnection Application under Engineering Studies.

- Terminate the Supplemental Review upon withdrawal of the Interconnection Application by the Interconnection Customer.

The Interconnection Customer shall respond with its choice within fifteen (15) Business Days of notification from Nodak Electric.

Figure 2 Studies Option Flow Chart



8 Supplemental Review

8.1. Acceptance of Supplemental Review

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 Nodak Electric's good faith estimate of the costs of such review within fifteen (15) Business Days once the Supplemental Review offer is made by Nodak Electric. If the written agreement and deposit have not been received by Nodak Electric within that timeframe, the Interconnection Application can only continue being evaluated with Engineering Studies or it can be withdrawn by the Interconnection Customer.

The Interconnection Customer may specify within the written agreement the order in which Nodak Electric will complete the Supplemental Review screens listed in Section 8.4.

8.2. Supplemental Review Costs

The Interconnection Customer shall be responsible for Nodak 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. If the deposit exceeds the invoiced costs, Nodak Electric will return such excess within twenty (20) Business Days of the invoice without interest.

8.3. Supplemental Review Timelines

Within thirty (30) Business Days following the receipt of the deposit for a Supplemental Review, Nodak Electric shall:

- Perform the Supplemental Review using the screens in Section 8.4.
- Notify the Interconnection Customer of the results in writing.

Unless the Interconnection Customer provides instruction for how to respond to a failure of any of the Supplemental Review screens in the written acceptance of Supplemental Review, Nodak Electric shall notify the Interconnection Customer within five (5) Business Days if a Supplemental Review screen is failed or if Nodak Electric is unable to perform the Supplemental Review screen. Nodak Electric shall then obtain the Interconnection Customer's permission to either:

- Continue evaluating the proposed interconnection using the Supplemental Review screens in Section 8.4.
- Terminate the Supplemental Review and continue evaluating the Interconnection Application with Engineering Studies.

- 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 Nodak Electric.

8.4. Supplemental Review Screens

The three Supplemental Review screens are the Minimum Load screen, the Voltage and Power Quality screen and the Safety and Reliability screen.

8.4.1. Minimum Load Screens

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, Nodak 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 8.3. The line section minimum load data shall include onsite load but not station service load served by the proposed DER in this screen.

The type of generation used by the proposed DER will be considered when calculating, estimating, or determining circuit or line section minimum load relevant for the application of this screen. 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.

When this screen is being applied to a DER that serves some station service load, only the net injection into Nodak Electric's electric system will be considered as part of the aggregate generation.

Nodak Electric 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.

8.4.2. Voltage and Power Quality Screens

In aggregate with existing generation on the line section the following conditions shall be met for the screen to be passed:

- The voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions.

- 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.

- The harmonic levels meet IEEE Standard 519 limits.

8.4.3. Safety and Reliability Screens

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 an Engineering Study. Nodak Electric shall give due consideration to the following and other factors in determining potential impacts to safety and reliability in applying this screen.

- Whether the line section has significant minimum loading levels dominated by a small number of customers (e.g., several large commercial customers).

- Whether the loading along the line section is uniform or even.

- 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.

- 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.

- 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.

- 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.

8.5. Identification of Construction of Facilities

If the proposed interconnection requires the construction of any distribution or transmission facilities, Nodak Electric shall notify the Interconnection Customer of the requirement when it provides the Supplemental Review results. Nodak Electric may

include a non-binding good faith estimate to construct the facilities included with the Supplemental Review results.

Upon being presented with the non-binding good faith estimate the Interconnection Customer has five (5) Business Days to inform Nodak Electric to proceed with the proposed interconnection or withdraw the Interconnection Application.

8.6. Supplemental Review Results

If the proposed interconnection passes the Supplemental Review screens in Section 8.4 and does not require construction of distribution or transmission facilities by Nodak Electric on its own system, Nodak Electric shall provide an executable Interconnection Agreement within ten (10) Business Days after the Supplemental Review screens are completed. Information regarding the Interconnection Agreement is detailed in Section 10.

If the proposed interconnection does not pass the supplemental review screens in Section 8.4, Nodak Electric shall provide the Interconnection Customer with the option of commencing with Engineering Studies. The Interconnection Customer shall notify Nodak Electric within fifteen (15) Business Days if they wish to proceed with Engineering Studies to retain their queue position or the Interconnection Application will be deemed withdrawn.

9 Engineering Studies

9.1. Scoping Meeting

A Scoping Meeting shall be held once the Interconnection Customer notifies Nodak Electric to proceed with Engineering Studies. The purpose of the Scoping Meeting is to discuss the Interconnection Application and review existing study results relevant to the Interconnection Application. The Parties shall further discuss the scope of the study related to system impacts and potential facility changes related to the distribution system to accommodate the interconnection of the proposed Interconnection Application. The Scoping Meeting may also include discussion whether the potential need for a transmission study is also required with Nodak Electric's transmission supplier.

9.2. Electric System Impacts

The Engineering 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. The Engineering Study is also to study the potential impacts, including but not limited to, those identified in the Scoping Meeting. The Engineering Study shall evaluate the impacts of the proposed interconnection on the reliability of the electric system.

9.3. Construction of Facilities

The Engineering Study shall also identify if construction of facilities is required. If construction of facilities is required to address electrical system impacts, the Engineering Study shall include the specification of facilities, along with an estimate the cost of the equipment, engineering, procurement and construction work.

9.4. Engineering Study Agreement

If the Parties agree at the Scoping Meeting that an Engineering Study should be performed, Nodak Electric shall provide the Interconnection Customer with an Engineering Study Agreement.

The Engineering Study Agreement shall include an outline of the scope of the Engineering Study and a non-binding good faith estimate of the cost to perform the study. If applicable, the Engineering Study Agreement shall list any additional and reasonable technical data on the DER needed to perform the study. The scope and cost responsibilities are to be described in the Engineering Study Agreement.

9.5. Engineering Study Costs

A deposit of the good faith estimated cost for the Engineering Study shall be provided by the Interconnection Customer with the return of a signed Engineering Study Agreement.

9.6. Engineering Study Timelines

Both Nodak Electric and the Interconnection Customer has timeline responsibilities with the Engineer Study. In order to remain in consideration for interconnection, an Interconnection Customer who has requested an Engineering Study shall meet the following conditions within twenty (20) Business Days of being provided an Engineering Study Agreement:

- Return a signed Engineering Study Agreement.
- Provide to Nodak Electric any requested additional and reasonable technical data on the DER needed to perform the Engineering Study.
- Pay the required study deposit.

Upon the Interconnection Customer's request, Nodak Electric shall grant a time frame extension as described in Section 14, if additional technical data is requested.

Nodak Electric shall make a good-faith effort to complete the formal Engineering Study within the duration agreed to by both parties stated in the Engineering Study Agreement.

9.7. Engineering Study Completion

Upon receipt of the completed Engineering Study provided by Nodak Electric, the Interconnection Customer has twenty (20) Business Days to provided notice to Nodak Electric if the Interconnection Application will still proceed or if it is to be withdrawn.

9.8. Engineering Study Confidentiality

The results of the Engineering Study and the information provided by the Interconnection Customer shall be treated with confidentiality as listed in Section 17.1.

10 Interconnection Agreements

10.1. Timelines

After the Interconnection Application has been approved by Nodak Electric or upon notice from the Interconnection Customer, Nodak Electric shall provide the Interconnection Customer with an executable Interconnection Agreement within ten (10) Business Days. Once supplied, the Interconnection Customer shall have twenty (20) Business Days to sign and return the Interconnection Agreement to Nodak Electric. Nodak Electric shall sign the Interconnection Agreement promptly after receiving the signed Interconnection Agreement from the Interconnection Customer.

If the Interconnection Customer fails to return a signed Interconnection Agreement to Nodak Electric within twenty (20) Business Days and fails to request an extension as explained in Section 14, the Interconnection Application will be deemed withdrawn.

10.2. Types of Interconnection Agreements

Tier I and Tier III tracks require an Interconnection Agreement as shown in Table 4. Tier II Interconnection Applications are not required to sign an Interconnection Agreement. The Interconnection Customer's signature on the Interconnection Application will acknowledge the Interconnection Customer's responsibility to operate the DER according to Nodak Electric's Technical Requirements.

Table 4. Types of Interconnection Agreements

Track		**Interconnection Agreement**
Tier I		DER Contract
Tier II		Limited Parallel Agreement or Signed Application is Sufficient.
Tier III	Sized Less Than 40 kW AC	DER Contract
	All Other DER systems	Technical Interconnection Agreement

10.3. DER Contract

For all Tier I and Tier III Interconnection Applications for DER systems sized 50kW AC or less, Nodak Electric shall provide the Interconnection Customer with an executable copy of Nodak Electric's DER Contract.

10.4. Technical Interconnection Agreement

For all Tier III Interconnection Applications for DER systems sized larger than 50kW AC, Nodak Electric shall provide an executable copy of the Technical Interconnection Agreement.

10.5. Completion of Agreement

The Interconnection Customer must return a signed DER Contract or Technical Interconnection Agreement prior to the scheduled commissioning of the DER system. Nodak Electric shall sign and return a copy of the fully executed DER Contract or the Technical Interconnection Agreement to the Interconnection Customer.

11 Modifications to Application

11.1. Procedures

At any time after the Interconnection Application is deemed complete, the Interconnection Customer or Nodak Electric may identify modifications to the proposed DER system that may improve costs and benefits (including reliability) of the proposed DER system and the ability for Nodak Electric to accommodate the proposed DER system. The Interconnection Customer shall submit to Nodak Electric in writing all proposed modifications to any information provided in the Interconnection Application. Nodak Electric cannot unilaterally modify the Interconnection Application.

11.2. Timelines

Within ten (10) Business Days of receipt of the proposed modification, Nodak Electric shall evaluate whether the proposed modification to the Interconnection Application constitutes a Material Modification.

Nodak Electric shall notify the Interconnection Customer in writing of the final determination of the proposed modification. For proposed modifications that are determined to be a Material Modification, the Interconnection Customer may choose to either 1) withdraw the proposed modification or 2) proceed with a new Interconnection Application. The Interconnection Customer shall provide its determination in writing to Nodak Electric within ten (10) Business Days after being provided the Material Modification determination. If the Interconnection Customer does not provide its determination within the timeline, the Interconnection Application shall be considered withdrawn.

If the proposed modification is not determined to be a Material Modification, then Nodak Electric shall notify the Interconnection Customer in writing that the modification has been accepted and the Interconnection Customer shall retain its eligibility for interconnection, including its place in the queue.

12 Interconnection

12.1. Metering

Any metering requirements necessitated by the use of the DER system shall be installed at the Interconnection Customer's expense. The metering requirement costs will be included in the final invoice of interconnection costs to the Interconnection Customer. Nodak Electric may charge Interconnection Customers an ongoing metering-related charge for an estimate of ongoing metering-related costs specifically demonstrated.

12.2. Inspection, Testing and Commissioning

The Interconnection Customer shall arrange for the inspection and testing of the DER system and the Customer's Interconnection Facilities prior to interconnection pursuant to Nodak Electric's Technical Requirements. Commissioning tests of the Interconnection Customer's installed equipment shall be performed pursuant to applicable codes and standards of Nodak Electric's Technical Requirements.

The Interconnection Customer shall notify Nodak Electric with adequate notice when the DER system is ready for commissioning. Nodak Electric shall send qualified personnel to the DER site to inspect the interconnection and participate in the commission testing of the DER system. Testing and inspection shall occur on a Business Day at a mutually agreed upon time and date. Nodak Electric may waive the right to witness the testing.

12.3. Interconnection Costs

The Interconnection Customer shall pay for the actual cost of the Interconnection Facilities and Distribution Upgrades along with Nodak Electric's cost to commission the proposed DER system. An estimate of the interconnection costs shall be stated in the DER Contract or Interconnection Agreement.

12.4. Technical Requirements

Nodak Electric shall make the Technical Requirements for any potential DER interconnection publicly available. Unless notified by Nodak Electric, the Interconnection Customer only needs to be in compliance of the current version of Nodak Electric's Technical Requirements at the time of interconnection.

12.5. Authorization for Parallel Operations

The Interconnection Customer shall not operate its DER system in parallel with Nodak Electric's distribution system without prior written authorization from Nodak Electric.

Nodak Electric shall provide such authorization after the Interconnection Customer has complied with all applicable parallel operations requirements. Requirements include successful testing completion and inspection of the DER system and full payment for any past-due invoices related to the Interconnection Process. Such authorization shall not be unreasonably withheld, conditioned or delayed.

12.6. Continual Compliance

The Interconnection Customer shall be fully responsible to operate, maintain, and repair the DER as required to ensure that it complies at all times with the interconnection standards to which it has been certified. The Interconnection Customer shall also operate its DER system in compliance with Nodak Electric's Technical Requirements. Nodak Electric may periodically inspect, at its own expense, the operation of DER system as it relates to power quality, thermal limits and reliability. Failure by the Interconnection Customer to remain in compliance with the technical requirements will result in the disconnection of the DER system from Nodak Electric's distribution system.

12.7. Disconnection of DER

Nodak Electric has the right to disconnect the DER in the event of the following:

- Does not apply for interconnection under Nodak Electric's Interconnection Process.
- Does not continue to follow and maintain IEEE 1547 settings approved by Nodak Electric as indicated by Nodak Electric's Technical Requirements.
- Refuses to sign either the DER Contract or the Interconnection Agreement.

Nodak Electric may temporarily disconnect the DER upon the following conditions:

- For scheduled outages with reasonable notice.
- For unscheduled outages or emergency conditions.
- If the DER does not operate in a manner consistent with Nodak Electric's Technical Requirements.
- Nodak Electric shall inform the Interconnection Customer in advance of any scheduled disconnections, or as reasonable, after an unscheduled disconnection.

13 Insurance

13.1. Insurance Requirements

At minimum, the Interconnection Customer shall maintain, for the duration the DER system is interconnected to Nodak Electric's distribution system, general liability insurance from a qualified insurance agency with a B+ or better rating by "A.M. Best" with a combined single limit not less than the amount listed in Table 5. 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. Evidence of the insurance shall state that coverage provided is primary and is not excess to or contributing with any insurance or self-insurance by Nodak Electric.

Table 5. Liability Insurance Requirements

DER System Size	Liability Insurance Requirement
$\leq$ 50kW AC	$300,000
$>$ 50kW AC	$1,000,000

For all proposed DER systems, except those that are qualifying systems sized 50kW AC or less, the general liability insurance shall, by endorsement to the policy or polices, include:

- Nodak Electric as additionally insured.
- Contain severability of interest clause or cross-liability clause.
- Provide that Nodak Electric shall not by reason incur liability to the insurance carrier for the payment of premiums for such insurance if Nodak Electric is included as an additionally insured.

13.2. Self-Insurance

The Interconnection Customer may choose to be self-insured provided there is an established record of self-insurance. The Interconnection Customer shall supply Nodak 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 in Section 13.1. Failure of the Interconnection Customer or Nodak 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.

13.3. Proof of Insurance

The Interconnection Customer shall furnish the required insurance certificates and endorsements to Nodak Electric prior to the initial operation of the DER. A copy of the Declaration page of the Homeowner's insurance policy is a common example of an insurance certificate. Thereafter, Nodak Electric shall have the right to periodically inspect or obtain a copy of the original policy or polices of insurance.

14 Extension of Timelines

14.1. Interconnection Customer Extensions

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 Nodak 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 circumstance.

14.2. Nodak Electric Extensions

For applicable time frames described in these procedures related to the Completeness Review, Initial Engineering Review and the Interconnection Agreement, Nodak Electric may notify the Interconnection Customer of a maximum five (5) Business Day timeline extension it may need to complete the appropriate Interconnection Process step.

14.3. Reasonable Efforts

Nodak Electric shall make Reasonable Efforts to meet all time frames provided in these procedures. If Nodak 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.

15 Site Summary Report

15.1. Site Summary Report Requests

The Interconnection Customer may submit a Site Summary Report Request, including a non-refundable fee of $500, for a Site Summary Report on a proposed project at a specific site. The Interconnection Customer must fill out the Site Summary Request form as completely as possible. Nodak Electric shall provide the readily available data listed in Section 15.3 within fifteen (15) Business Days of receipt of a completed request form and payment. The Site Summary Report produced by Nodak Electric is non-binding, does not confer any rights, and does not preclude the Interconnection Customer from any Interconnection Process steps including submission of the Interconnection Application.

15.2. Information Provided

Using the information provided in the Site Summary Report Request form, Nodak Electric will identify the substation/area bus, bank or circuit likely to serve the proposed Point of Common Coupling (PCC). This selection by Nodak 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 Site Summary Reports if information about multiple PCCs is requested.

The Site Summary Report will only include existing data that is readily available. A request for a Site Summary Report does not obligate Nodak Electric to conduct a study or other analysis of the proposed DER in the event that data is not readily available. Nodak Electric will provide the Interconnection Customer with the data that is available. The confidentiality provisions in Section 17.1 apply to Site Summary Reports.

15.3. Site Summary Report Components

The Site Summary Report shall include the following pieces of information provided the data currently exists and is readily available.

- 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.

- 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.

- 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.

- 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).

- Substation nominal distribution voltage and/or transmission nominal voltage if applicable.

- Nominal distribution circuit voltage at the proposed Point of Common Coupling.

- Approximate circuit distance between the proposed Point of Common Coupling and the substation.

- Relevant line section(s) actual or estimated peak load and minimum load data, including daytime minimum load and absolute minimum load, when available.

- Whether the Point of Common Coupling is located behind a line voltage regulator.

- 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.

- Number of phases available on the Area EPS medium voltage system at the proposed Point of Common Coupling. If a single phase, distance from the three-phase circuit.

- Limiting conductor ratings from the proposed Point of Common Coupling to the distribution substation.

- Whether the Point of Common Coupling is located on a spot network, grid network, or radial supply.

- 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.

16 Disputes

16.1. Procedures

The Parties agree in a good faith effort to attempt to resolve all disputes arising out of the Interconnection Process, associated studies and Interconnection Agreements. The Parties agree to follow the established dispute resolution policy adopted by Nodak Electric.

17 Clauses

17.1. Confidentiality

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.

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 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 to any confidential information furnished.

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.

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 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.

17.2. Non-Warranty

Nodak 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 Nodak Electric. Nodak Electric does not guarantee uninterrupted power supply to the DER and will operate the distribution system with the same reliability standards for the entire membership base.

17.3. Indemnification

Each Party is protected from liability incurred to third parties as a result of carrying out the provisions of this Interconnection Process and subsequent Interconnection Agreements. 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 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.

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.

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.

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.

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.

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.

17.4. 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 an indirect, incidental, special, consequential, or punitive damages of any kind whatsoever, except as allowed under Section 17.3.

18 Glossary

Application Agent – A person designated in writing by the Interconnection Customer to represent or provide information to Nodak Electric on the Interconnection Customer's behalf throughout the Interconnection Process.

Area Electric Power System (Area EPS) – The electric power distribution system connected at the Point of Common Coupling.

Area Electric Power System Operator – An entity that owns, controls, or operates the electric power distribution systems that are used for the provision of electric service in North Dakota. For this Interconnection Process Nodak Electric the Area Electric Power System Operator.

Business Day – Monday through Friday, excluding the holidays of New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. Any communication to have been sent or received after 4:30 p.m. Central Prevailing Time or on a Saturday, Sunday or Holiday shall be considered to have been sent on the next Business Day.

Certified Equipment – Certified equipment is equipment that has been tested by a national recognized lab meeting a specific standard. For DER systems, UL 1741 listing is a common form of DER inverter certification.

DER Contract – Nodak Electric's Interconnection Agreement for qualifying new and existing interconnections between Nodak Electric and a DER system sized 50 kilowatts alternating current or less.

Confidential Information – Any confidential and/or proprietary information provided by one Party to the other Party and is clearly marked or otherwise designated "Confidential." All procedures, design, operating specifications, and metering data provided by the Interconnection Customer may be deemed Confidential Information. See Section 17.1 for further information.

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 Interconnection Process and Interconnection Agreements, the DER includes the Customer's Interconnection Facilities but shall not include Nodak Electric's Interconnection Facilities.

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

Distribution Upgrades – The additions, modifications, and upgrades to the distribution system at or beyond the Point of Common Coupling to facilitate interconnection of the DER and render

the distribution service necessary to affect the Interconnection Customer's connection to the distribution system. Distribution Upgrades do not include Interconnection Facilities.

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

Engineering Studies – Studies performed to ensure the Interconnection Application can interconnect when initial engineering screens and/or supplemental studies are failed.

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 acts 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, Nodak Electric, or any Affiliate thereof. The Cooperative Board is the authority governing interconnection requirements unless otherwise provided for in the Technical Requirements.

Interconnection Agreement – The terms and conditions between Nodak Electric and Interconnection Customer (Parties). See Section 10 for when the DER Contract or the Technical Interconnection Agreement applies.

Interconnection Application – The Interconnection Customer's request to interconnect a new or modified DER system, as described in Section 6.

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

Interconnection Facilities – Nodak Electric'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 Nodak Electric'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 Nodak Electric Interconnection Facilities include sole-use facilities; such as, line extensions, controls, relays, switches, breakers, transformers and shall not include Distribution Upgrades or Network Upgrades.

Interconnection Process – Nodak Electric's interconnection steps for DER systems to be interconnected to the Distribution System.

Material Modification – A modification to machine data, equipment configuration or to the interconnection site of the DER at any time after receiving notification by Nodak Electric 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.[5]

Nameplate Rating – Nominal voltage (V), current (A), maximum active power (kW AC), 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. The DER system's capacity may, with the Area EPS's agreement, be limited thought use of control systems, power relays or similar device settings or adjustments as identified in IEEE 1547. The nameplate ratings referenced in the Interconnection Process are alternating current nameplate DER ratings at the Point of DER Connection.

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

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

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

Party or Parties – Nodak Electric and the Interconnection Customer.

Point of Common Coupling (PCC) – The point where the Interconnection Facilities connect with Nodak Electric's Distribution System. See Figure 1. Equivalent, in most cases, to "service point" as specified by Nodak Electric and described in the National Electrical Code and the National Electrical Safety Code.

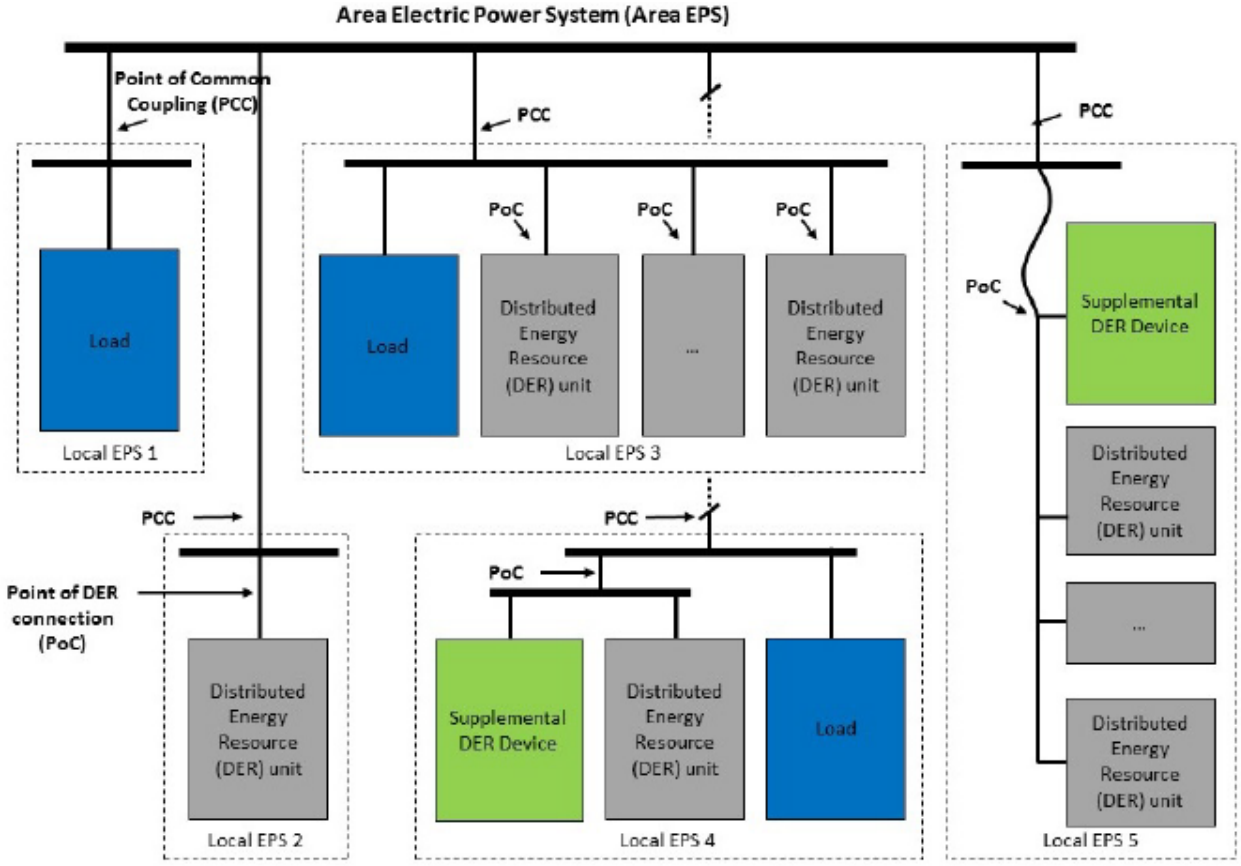


Figure 1: Point of Common Coupling and Point of DER Connection

(Source: IEEE 1547)

Point of DER Connection (PoC) – When identified as the Reference Point of Applicability, the point where an individual DER is electrically connected in a Local EPS and meets the

requirements of this standard exclusive of any load present in the respective part of the Local EPS (e.g. terminals of the inverter when no supplemental DER device is required.) For DER unit(s) that are not self-sufficient to meet the requirements without a supplemental DER device(s), the Point of DER Connection is the point where the requirements of this standard are met by DER in conjunction with a supplemental DER device(s) exclusive of any load present in the respective part of the Local EPS.

Queue Position – The order of a valid Interconnection Application, relative to all other pending valid Interconnection Applications, that is established based upon the date- and time- of receipt of the complete Interconnection Application as described in Section 7.3.

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, Nodak Electric and Customer may determine a point between the Point of Common Coupling and Point of DER Connection.

Scoping Meeting – A meeting between Nodak Electric and the Interconnection Customer to determine the scope of the Engineering Study or if the Interconnection Application will be withdrawn.

Studies Option Meeting – A meeting between Nodak Electric and the Interconnection Customer to determine if a Supplemental Review should be performed, if an Engineering Study should be performed, or the Interconnection Application will be withdrawn.

Supplemental Review – A more in-depth engineering review of the Interconnection Application(s). This review occurs when initial engineering screens are failed, but prior to Engineering Studies.

Technical Interconnection Agreement – Nodak Electric's Interconnection Agreement for qualifying new and existing interconnections between Nodak Electric and a DER system sized larger than 50 kilowatts alternating current.

Technical Requirements – The term including all of the DER technical interconnection requirement documents for Nodak Electric.

Tier I – The track for evaluating an Interconnection Application for a certified inverter-based DER no larger than 20kW.

Tier II – The track for evaluating an Interconnection Application for a standby DER system no larger than 10 MW.

Tier III – The track for evaluating an Interconnection Application for all other types of DER systems no larger than 10 MW that operate in extended parallel/continuous with the distribution system and do not fall under the Tier I or Tier II tracks.

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.

Upgrades – The required additions and modifications to Nodak Electric'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.

19 Interconnection Process Milestones