

## Definitions for Interconnection Process

Between program requirements and the Minnesota DER Interconnection Process, it can be difficult to understand what individual terms mean. We provide the following definitions to help you move through the process successfully.

<b>Interconnection Process Steps</b>	<b>Definition</b>	<b>Status (as defined in the online portal)</b>
Completeness Review	Before entering detailed engineering review (initial/supplemental review and/or studies), an application must be deemed complete. This check ensures that Xcel Energy has enough information from the Interconnection Customer to perform any necessary analyses. Detailed document requirements, as well as examples, are provided in the links below.	Your application will be deemed complete at this status/step: Initiate Application / Complete
Initial Review	Within 15 Business Days after the Area EPS Operator notifies the Interconnection Customer it has received a complete Interconnection Application, the Area EPS Operator shall perform an initial review.	Undergoing Initial Review Screens. Also known as “Initial Engineering Screens”
Supplemental Review	If your application fails the Initial Review, you can move into 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 the Area EPS Operator’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 Operator 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the Interconnection Application shall continue to be evaluated under the Section 4 Study Process unless it is withdrawn by the Interconnection Customer.	Within this status, your application is pending payment for a supplemental review, undergoing supplemental review screens or reviewing supplemental review results.
Application Process	Pre-MN DIP applications will not follow MN DIP process tracks. Overall the fundamental engineering reviews are similar, but the MN DIP alters some workflows and schedules. MN DIP application tracks are described below. Note that for a given application, the initial process track represents the minimum required reviews. Depending on the generators’ impact on the distribution system, additional more in-depth analyses may be required	
Simplified Process	For 20kW and smaller systems utilizing UL1741 certified inverters and equipment. This process track is most effective for small DER units with minimal impact on the distribution system. If these applications successfully pass the initial engineering review screens, no further analysis is needed prior to obtaining a detailed cost estimate. If initial review identifies areas of potential concern, additional screens and possibly studies may be needed	
Fast-Track Process	The MN DIP Fast Track process provides a potential expedited path for larger DER units. Initial fast track eligibility is dependent on the proposed generator size as well as several aspects of the adjacent distribution system. Refer to the MN DIP for full details. Qualifying projects will begin engineering review with the same initial screens as the simplified process. Depending on the screen results, the project may proceed to a detailed estimate or require further analysis.	

Study Process – System Impact Study	The study process will be followed initially for any proposed generation system that does not qualify for the Simplified or Fast-Track processes. This track consists of one or more detailed engineering reviews, including a system impact study that is a detailed analysis of the distribution system considering impacts of the proposed DER.	Within this status, your application is pending payment and agreement for the system impact study review, undergoing study or reviewing study results.
Study Process – Affected System/Transmission Study	Occasionally a proposed DER will impact a distribution system not owned by Xcel Energy, or possibly even the bulk transmission system. In these cases it is necessary to engage these other entities to ensure a safe and reliable interconnection.	If an affected System/transmission study is needed, this typically occurs at the same time as a system impact study.
Facility Study	<p>A detailed design performed using all information available to date concerning a proposed DER. The facility study provides a more accurate cost estimate when compared to a more traditional good faith estimate.</p> <p>Note that changes in project details or permitting issues can significantly impact final design costs, regardless of what is noted in the facility study. Note that where multiple projects are in the same substation or feeder queue, analyses will proceed sequentially through the queue regardless of process track for any individual application.</p>	Within this status, your application is pending payment and agreement for the facility study review, undergoing study or reviewing (and commenting) on study results.
Interconnection Agreement	The interconnection agreement formally documents terms and conditions related to customer operation and maintenance for a proposed interconnection. The agreement is a legally binding contract between the customer and us which sets forth the amount of generation allowed and invokes other technical, operating, and tariff requirements. Following completion of any required engineering screens and studies, we will provide an interconnection agreement and cost estimate for any necessary upgrades to the customer. Both the Section 9 and Section 10 Tariffs contain information on interconnection agreements	Within this status, your application is pending interconnection agreement, pending signature(s), or pending countersignature.
Design and Construction	Once the customer signs and returns an interconnection agreement and we countersign, work proceeds with detailed design and construction of our infrastructure supporting the requested generation interconnection. Coordination of our construction efforts are based on the developer’s provided in-service date and is contingent on other system work, outages/emergencies, mutual aid situations, and the progress of all sites under construction on a given feeder. Communication to coordinate work between customer and Xcel Energy personnel during this time is critical. Once all Xcel Energy and customer facilities are built, witness testing is required and we must provide a final permission to operate prior to the customer bringing their generation online	Within this status, your application is pending construction. For Simplified Track applications, your application is pending a Certificate of Completion to confirm installing is complete.

Metering & Testing	After installation, the Simplified Interconnection Customer returns the Certificate of Completion to the Area EPS Operator. Prior to parallel operation, and consistent with the MN DIP, the Area EPS Operator 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 Operator 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 Operator does not inspect within ten (10) Business Days, the witness test is deemed waived.	Within this status, your application is pending meter order, witness testing and/or meter installation.
Permission to Operate	System is active. The Interconnection Customer shall not operate its DER in parallel with the Area EPS Operator's Distribution System without prior written permission to operate authorization from the Area EPS Operator. The Area EPS Operator shall provide such authorization within three (3) Business Days from when the Area EPS Operator 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.	Within this status, your application is pending or has received permission to operate the system. Any applicable final accounting / true-ups will also take place during this stage.