

**LEVEL 2-4
INTERCONNECTION REQUEST APPLICATION FORM**

(For Distributed Generation Facilities 10 MVA or less in the CIPCO ("G&T") area)

INSTRUCTIONS:

1. *Indicates required information.
2. Mail completed form with application fee (see page 3) to Midland Power Cooperative ("Cooperative").

INTERCONNECTED MEMBER-CONSUMER CONTACT INFORMATION <i>(Applicant must be owner or lessee of the facility)</i>				
*Owner / Company <i>(Legal Entity Name)</i>			* Contact Name	
* Mailing Address		* City		*State
* Phone No. <i>(Daytime)</i>	Phone No. <i>(Evening)</i>	Facsimile No.	* Email Address	
ALTERNATE CONTACT INFORMATION <i>(If different from Member-Consumer Contact Information)</i>				
Owner / Company <i>(Legal Entity Name)</i>			Contact Name	
Mailing Address		City		*State
Phone No. <i>(Daytime)</i>	Phone No. <i>(Evening)</i>	Facsimile No.	Email Address	
FACILITY LOCATION <i>(If different from information above)</i>				
* Facility Address		* City		*State
* Cooperative serving Facility Site Midland Power Cooperative	Account Number of Facility Site <i>(existing member-consumers)</i>		Meter No. <i>(existing member-consumers)</i>	
EQUIPMENT CONTRACTOR				
* Company Name			* Contact Name	
* Mailing Address		* City		*State
* Phone No. <i>(Daytime)</i>	Phone No. <i>(Evening)</i>	Facsimile No.	* Email Address	
ELECTRICAL CONTRACTOR <i>(If different from Equipment Contractor)</i>				
*Owner / Company Name			* Contact Name	
* Mailing Address		* City		*State
* Phone No. <i>(Daytime)</i>	Phone No. <i>(Evening)</i>	Facsimile No.	* Email Address	
License No. <i>(If applicable)</i>			Active License? <i>(If applicable)</i> <input type="checkbox"/> Yes <input type="checkbox"/> No	
APPLICANT OWNERSHIP INTEREST <i>(check one)</i>				
<input type="checkbox"/> Owner <input type="checkbox"/> Lease <input type="checkbox"/> 3 rd Party PPA <input type="checkbox"/> Other (Please Explain) _____				

THIRD PARTY INFORMATION

(Only complete this section if the facility is to be located on the premises of someone other than the applicant)

Location of Proposed Facility		Name of Customer at said location	
* Mailing Address		* City	
* Phone No. (Daytime)	Phone No. (Evening)	*State	*Zip

ELECTRIC SERVICE INFORMATION FOR MEMBER-CONSUMER FACILITY WHERE GENERATOR WILL BE INTERCONNECTED

*Capacity (Service Entrance): _____ (Amps)	Voltage: _____ (Volts)	* Type of Service <input type="checkbox"/> Single Phase <input type="checkbox"/> Three-Phase	
* If three-phase transformer, indicate type: Primary Winding: <input type="checkbox"/> Wye <input type="checkbox"/> Delta Secondary Winding: <input type="checkbox"/> Wye <input type="checkbox"/> Delta		* Transformer Size	*Impedance

* INTENT OF GENERATION *(check one)*

<input type="checkbox"/>	Offset Load (Unit will operate in parallel, but will not export power to Cooperative or G&T) (If this option is selected, neither the Cooperative nor the G&T will purchase any portion of the generation facility output)
<input type="checkbox"/>	Self-Use and Sales to the Cooperative (or G&T) (Unit will operate in parallel and may export and sell excess power to Cooperative (or G&T) pursuant to the Cooperative's tariff and a separate power purchase agreement to be executed by the parties)
<input type="checkbox"/>	Wholesale Market Transaction (Unit will operate in parallel and participate in MISO, SPP, or other wholesale power markets pursuant to separate requirements and agreements with MISO, SPP, or other transmission providers, and applicable rules of the Federal Energy Regulatory Commission)
<input type="checkbox"/>	Back-up Generation (Units that temporarily operate in parallel with the electric distribution system for more than 100 milliseconds) (Note: Back-up units that do not operate in parallel for more than 100 milliseconds do not need an interconnection agreement.)
<input type="checkbox"/>	Sale of generation output to interconnected member-consumer upon whose premise the facility is located and export and sell any excess power to the Cooperative (or G&T), which sales may require a separate point of interconnection, metering, and power purchase agreement.
<input type="checkbox"/>	Net Metering: The Cooperative has developed a net metering option for certain facilities as described in the Interconnection Agreement and/or G&T's Power Purchase Agreement. (subject to availability).
<input type="checkbox"/>	Other: (Please Explain):

*GENERATOR AND PRIME MOVER INFORMATION

Energy Source			
<input type="checkbox"/> Wind <input type="checkbox"/> Solar <input type="checkbox"/> Process Byproduct <input type="checkbox"/> Biomass <input type="checkbox"/> Hydro <input type="checkbox"/> Oil <input type="checkbox"/> Natural Gas <input type="checkbox"/> Coal <input type="checkbox"/> Other _____			
If Solar: Number of Inverters _____ Number of Panels _____ Tilt (degrees) _____ Azimuth (180° is South facing) _____ Array Type: <input type="checkbox"/> Fixed <input type="checkbox"/> Single Axis <input type="checkbox"/> Dual Axis			
Energy Converter Type			
<input type="checkbox"/> Wind Turbine <input type="checkbox"/> Photovoltaic Cell <input type="checkbox"/> Fuel Cell <input type="checkbox"/> Reciprocating Engine <input type="checkbox"/> Other _____			
Generator #1 Size: _____ (kW) _____ (kVA)	Generator #1 Nameplate Rating (AC): _____ (kW)	Generator #2 Size: _____ (kW) _____ (kVA)	Generator #2 Nameplate Rating (AC): _____ (kW)
Generator #3 Size: _____ (kW) _____ (kVA)	Generator #3 Nameplate Rating (AC): _____ (kW)	Total Number of Units: _____	Total Capacity of All Generators: _____ (kW) _____ (kVA)
Disconnection Device: Identify type and location of disconnection device:			
Is the generation facility a qualifying facility as defined under Public Utilities Regulatory Policy Act (18 CFR Part 292, Subpart B)? <input type="checkbox"/> Yes <input type="checkbox"/> No			

* REQUESTED PROCEDURE UNDER WHICH TO EVALUATE INTERCONNECTION REQUEST (check one)	
Please indicate below which review procedure applies to the interconnection request. The review procedure used is subject to confirmation by the Cooperative.	
<input type="checkbox"/>	Level 2 - Lab-certified interconnection equipment with an aggregate electric nameplate capacity less than or equal to 150 kVA. Lab-certified is defined in Iowa Utilities Board Chapter 45 rules on Electric Interconnection of Distributed Generation Facilities (199 IAC 45.1). (Application fee is \$250 plus \$1.00 per kVA)
<input type="checkbox"/>	Level 3 - Distributed generation facility does not export power. Nameplate capacity rating is less than or equal to 50 kVA if connecting to area network or less than 150 kVA if connecting to a radial distribution feeder. (Application fee amount is \$500 plus \$2.00 per kVA.)
<input type="checkbox"/>	Level 4 - Nameplate capacity rating is less than or equal to 10 MVA and the distributed generation facility does not qualify for a Level 1, Level 2, or Level 3 review, or the distributed generation facility has been reviewed but not approved under a Level 1, Level 2, or Level 3 review. (Application fee amount is \$1,000 plus \$2.00 per kVA, to be applied toward any subsequent studies related to this application.)
Note: Descriptions for interconnection review categories do not list all criteria that must be satisfied. For a complete list of criteria, please refer to Section 25.5 of the Cooperative's tariff.	

DISTRIBUTED GENERATION FACILITY INFORMATION	
Commissioning Test Date: _____ (If the Commissioning Test Date changes, the interconnected member-consumer must inform the Cooperative as soon as it is aware of the changed date. Notice must be at least 15 business days prior to the test date.)	
List interconnection components/systems to be used in the distributed generation facility that are lab-certified.	
*Component/System	NRTL Providing Label and Listing
Please provide copies of the manufacturer brochures or technical specifications.	

*ENERGY PRODUCTION EQUIPMENT/INVERTER INFORMATION			
<input type="checkbox"/> Induction <input type="checkbox"/> Inverter <input type="checkbox"/> Synchronous <input type="checkbox"/> Other _____			
Rating _____ (kW)	Rating _____ (kVA)	*Rated Voltage _____ Volts	* Rated Current _____ Amps
* System Type Tested? (Total System): <input type="checkbox"/> Yes <input type="checkbox"/> No (attach product literature)			

*FOR SYNCHRONOUS MACHINES			
Note: Contact Cooperative to determine if all the information requested in this section is required for the proposed distributed generation facility.			
Manufacturer: _____			
* Model No: _____		* Version No. _____	
Submit Copies of the Saturation Curve and Vee Curve <input type="checkbox"/> Salient <input type="checkbox"/> Non-Salient			
Torque (lb-ft)	Rated RPM	Field Amperes _____ at rated generator voltage and current and _____ % PF over-excited	
Type of Exciter		Output Power of Exciter	Type of voltage regulator
Locked Rotor Current (Amps)	Synchronous Speed (RPM)	Winding Connection	Minimum Operating Frequency/Time
Generator Connection _____ Delta _____ Wye _____ Wye Grounded			
Direct-axis Synchronous Reactance (Xd) _____ (ohms)	Direct-axis Transient Reactance (X'd) _____ (ohms)	Direct-axis Sub-Transient Reactance (X''d) _____ (ohms)	
Negative Sequence Reactance _____ (ohms)	Zero Sequence Reactance _____ (ohms)	Natural Impedance or Grounding Resistor (if any) _____ (ohms)	

*FOR INDUCTION MACHINES			
<u>Note:</u> Contact Cooperative to determine if all the information requested in this section is required for the proposed distributed generation facility.			
Manufacturer:		Model No.	
* Version No.		Locked Rotor Current (Amps)	
Rotor Resistance (Rr) _____ (ohms)	Exciting Current _____ (Amps)	Rotor Resistance (Xr) _____ (ohms)	Reactive Power Required _____
Magnetizing Reactance (Xm) _____ (ohms)	VARs (<i>No Load</i>) _____	Stator Resistance (Rs) _____ (ohms)	VARs (<i>Full load</i>) _____
Stator Reactance (Xs) _____ (ohms)	Short Circuit Reactance (Xd) _____ (ohms)	Phases <input type="checkbox"/> Single Phase <input type="checkbox"/> Three-Phase	
Frame Size	Design Letter	Temp Rise (°C)	

REVERSE POWER RELAY INFORMATION (LEVEL 3 REVIEW ONLY)		
Manufacturer:		Model No.
Relay Type:	Reverse Power Setting	Reverse Power Time Delay (<i>if any</i>)

*FOR INVERTER-BASED MACHINES			
Inverter Information			
Manufacturer:		Model No.	
Type <input type="checkbox"/> Forced Commutated <input type="checkbox"/> Line Commutated		Rated Output _____ Watts _____ Volts	
Efficiency (%)	Power Factor (%)	Inverter UL 1741 Listed <input type="checkbox"/> Yes <input type="checkbox"/> No	
DC Source/Prime Mover			
Rating _____ (kW)	Rating _____ (kVA)	Rated Voltage _____ Volts	Open Circuit Voltage (<i>if applicable</i>) _____ Volts
Rated Current (Amps)		Short Circuit Current (<i>if applicable</i>) (Amps)	

*OTHER FACILITY INFORMATION
<p>One-Line Diagram - A basic drawing of an electric circuit in which one or more conductors are represented by a single line and each electrical device and major component of the installation, from the generator to the point of interconnection, are noted by symbols.</p> <p>One-Line Diagram attached: <input type="checkbox"/> Yes</p> <p>Plot Plan - A map or sketch showing the distributed generation facility's location in relation to streets, alleys, or other geographic markers (i.e. section pin, corner pin, buildings, permanent structures, etc.).</p> <p>Plot Plan attached: <input type="checkbox"/> Yes</p>

***INTERCONNECTED MEMBER-CONSUMER SIGNATURE**

I hereby certify that all of the information provided in this Interconnection Request Application Form is true.

Applicant Signature <i>(signature must reflect Contact Name under section Interconnection Applicant Contact Information)</i>		Date
Printed Name	Title	
An application fee is required before the application can be processed. Please verify that the appropriate fee is included with the application (see page 2):		Amount \$

FOR COOPERATIVE USE ONLY

Date Received	Project Location No.
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***COOPERATIVE ACKNOWLEDGEMENT**

Receipt of the application fee, if any, is acknowledged by the signature below. Cooperative has determined that the interconnection request is complete. Interconnection of the distributed generation facility is conditionally approved contingent upon the terms and conditions of this Application and its applicable Interconnection Agreement, the return of the attached Certificate of Completion, duly executed verification of electrical inspection and successful final inspection by Cooperative.

Cooperative Representative's Signature		Date
Printed Name	Title	

Note: Nothing in this Application, in the Interconnection Agreement, or in Cooperative's tariffs shall be construed to guarantee a particular price or rate for any period of time for an interconnected member-consumer seeking services pursuant to this Application. In the event the tariff rate applicable to operations or requirements of an interconnected member-consumer seeking services pursuant to this Application is modified for such rate class, such new rate shall be applicable to the interconnected member-consumer.

Note: The Cooperative has developed a Net Metering option for facilities with an installed design capacity at any one geographic location of less than 50 kW and which is intended to serve only the electrical requirements of the owner of the net metering facility. The availability of this optional rate is subject to a total facility cap of 270 kW of nameplate capacity on the Cooperative's system.

Subtractive electric heat metering is not allowed under the Net Metering option.

Note: This Application is governed by the terms and conditions outlined in the corresponding Levels 2 to 4 Interconnection Agreement.