LEVELS 2-4
INTERCONNECTION REQUEST APPLICATION FORM
(For Distributed Generation Facilities 10 MVA or Less)

INSTRUCTIONS:

1. ***Indicates required information.**
2. Mail completed form with application fee (see page 2) to your utility

INTERCONNECTION CUSTOMER CONTACT INFORMATION			
*Owner/Company *(Legal Entity Name)*		*Contact Name	
*Mailing Address	*City	*State	*Zip
*Phone No. *(Daytime)*	Phone No. *(Evening)*	Facsimile No.	*Email Address

ALTERNATE CONTACT INFORMATION *(if different from Customer Contact Information)*			
Owner / Company *(Legal Entity Name)*		Contact Name	
Mailing Address	City	State	Zip
Phone No. *(Daytime)*	Phone No. *(Evening)*	Facsimile No.	Email Address

FACILITY LOCATION (*if different from Customer Contact Information)*			
*Facility Address or Latitude and Longitude	*City	*State	*Zip
*Utility Serving Facility Site	Account No. of Facility Site *(existing utility customers)*	*Meter No. *(existing utility customers)*	

EQUIPMENT CONTRACTOR			
*Name		*Contact Name	
*Mailing Address	*City	*State	*Zip
*Phone No. *(Daytime)*	Phone No. *(Evening)*	Facsimile No.	*Email Address

ELECTRICAL CONTRACTOR *(if different from Equipment Contractor)*			
Name		Contact Name	
Mailing Address	City	State	Zip
Phone No. *(Daytime)*	Phone No. *(Evening)*	Facsimile No.	*Email Address
License No. *(if applicable)*		Active License? *(if applicable)* ◯ YES ◯ NO	

ELECTRIC SERVICE INFORMATION FOR CUSTOMER FACILITY WHERE GENERATOR WILL BE INTERCONNECTED			
*Existing Capacity *(Service Entrance)* (Amps)	*Proposed Capacity *(Service Entrance)* (Amps)	Voltage (Volts)	*Type of Service ◯ Single Phase ◯ Three Phase ◯ Breaker - Existing Panel ◯ Line Side Tap with Fuse ◯ Inside Sealed Enclosure
If 3 Phase Transformer, indicate type: *Primary* Winding ◯ Wye ◯ Delta *Secondary* Winding ◯ Wye ◯ Delta		Transformer Size	Impedance
*Does this application require a group interconnection study? ◯ YES ◯ NO			
*Is this project an expansion of a current distributed generation facility? ◯ YES ◯ NO			

APPLICANT OWNERSHIP INTEREST *(check one)*
◯ Owner ◯ Lease ◯ 3rd Party PPA ◯ Tenant ◯ Other (Please explain)

*INTENT OF GENERATION (check one)	
◯	Offset Load (Unit will operate in parallel and may export without net metering or without selling excess power and energy pursuant to Iowa Utilities Board rule 199 IAC 15.5 and the utility's tariff).
◯	Net Metering (Unit will operate in parallel and will export power to utility pursuant to Iowa Utilities Board rule 199 IAC 15.11(5) and the utility's net metering, net billing, or inflow/outflow tariff).
◯	Self-Use and Sales to the Utility (Unit will operate in parallel and may export and sell excess power to utility pursuant to Iowa Utilities Board rule 199 IAC 15.5 and the utility's tariff).
◯	Wholesale Market Transaction (Unit will operate in parallel and participate in MISO (Midwest Independent System Operators) or other wholesale power markets pursuant to separate requirements and agreements with MISO or other transmission providers, and applicable rules of the Federal Energy Regulatory Commission).
◯	Back-Up Generation (Units that temporarily operate in parallel with the electric distribution system for more than 100 milliseconds. Units that temporarily operate in parallel with the electric distribution system for 100 milliseconds or less are outside the scope of Chapter 45 Interconnection. Contact the utility for applicable interconnection procedures).
NOTE: Back-up units that do not operate in parallel for more than 100 milliseconds do not need an interconnection agreement.	

*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 utility.	
◯	Level 2 - Lab-certified interconnection equipment with an aggregate electric nameplate capacity less than or equal to 2 MVA for non-inverter based systems or inverter-based systems as defined in 199 IAC 45.8(2)(b). 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. If the utility performs a Witness Test as specified in 199 IAC 45.5(10), the utility may charge the interconnected customer an additional cost-based fee of no more than $125.)
◯	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 or equal to 10 MVA if connecting to a radial distribution feeder. (Application fee amount is $500 plus $2.00 per kVA)
◯	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 Iowa Utilities Board chapter 45 rules on Electric Interconnection of Distributed Generation Facilities (199 IAC 45).	

*DISTRIBUTED GENERATION FACILITY INFORMATION	
Commissioning Test Date *(If the Commissioning Test Date changes/unknown, the interconnection customer must inform the utility as soon as aware of the changed/known date, but no later than 15 business days.)*	
*List interconnection components/systems to be used in the distributed generation facility that are lab-certified.	
*Component/System	NRTL Providing Label and Listing
Copies of manufacturer brochures and/or technical specifications included. ☐ YES	

*DISTRIBUTED GENERATION FACILITY INFORMATION

*Energy Source/Converter

☐ Wind Turbine ☐ Solar Photovoltaic Cell ☐ Biomass ☐ Hydro ☐ Diesel Engine ☐ Natural Gas ☐ Fuel Oil ☐ Storage - Specify type

☐ Other

*INFORMATION FOR INVERTER-BASED FACILITIES

Inverter Information (Attach manufacturer's technical specifications and label information from a nationally recognized testing laboratory, e.g. UL.)

Manufacturer Model	Quantity	Inverter UL1741 Listed ◯ Yes ◯ No	Continuous Rated Output kW_{AC} $Volts_{AC}$	Number of Phase ◯ 1 ◯ 3	Power Factor %	Efficiency %
Manufacturer Model	Quantity	Inverter UL1741 Listed ◯ Yes ◯ No	Continuous Rated Output kW_{AC} $Volts_{AC}$	Number of Phase ◯ 1 ◯ 3	Power Factor %	Efficiency %

*DC Source/Prime Mover

Solar Module #1 Manufacturer Model	Quantity	Power Rating $Watts_{DC}$
Solar Module #2 Manufacturer Model	Quantity	Power Rating $Watts_{DC}$

*Solar Module Orientation

Type ☐ Fixed ☐ Single Axis ☐ Dual Axis	Tilt (degrees)	Azimuth (180º = south)	Solar Module #1 Quantity	Solar Module #2 Quantity
Type ☐ Fixed ☐ Single Axis ☐ Dual Axis	Tilt (degrees)	Azimuth (180º = south)	Solar Module #1 Quantity	Solar Module #2 Quantity
Type ☐ Fixed ☐ Single Axis ☐ Dual Axis	Tilt (degrees)	Azimuth (180º = south)	Solar Module #1 Quantity	Solar Module #2 Quantity
Type ☐ Fixed ☐ Single Axis ☐ Dual Axis	Tilt (degrees)	Azimuth (180º = south)	Solar Module #1 Quantity	Solar Module #2 Quantity

*Inverter/Solar Module Combinations (Use a separate row for each unique combination of Inverter and Solar Modules)

Inverter Information (Attach manufacturer's technical specifications and label information from a nationally recognized testing laboratory, e.g. UL.)

Inverter Type: Quantity: ◯ String ◯ Microinverter	Solar Module #1 Quantity	Solar Module #2 Quantity	kW_{DC} Connected to each inverter: kW_{DC}	Continuous Rated Output of each inverter: kW_{AC}	Inverter is DC Limited ($kW_{DC} < kW_{AC}$) ◯ Yes ◯ No
Inverter Type: Quantity: ◯ String ◯ Microinverter	Solar Module #1 Quantity	Solar Module #2 Quantity	kW_{DC} Connected to each inverter: kW_{DC}	Continuous Rated Output of each inverter: kW_{AC}	Inverter is DC Limited ($kW_{DC} < kW_{AC}$) ◯ Yes ◯ No
Inverter Type: Quantity: ◯ String ◯ Microinverter	Solar Module #1 Quantity	Solar Module #2 Quantity	kW_{DC} Connected to each inverter: kW_{DC}	Continuous Rated Output of each inverter: kW_{AC}	Inverter is DC Limited ($kW_{DC} < kW_{AC}$) ◯ Yes ◯ No
Inverter Type: Quantity: ◯ String ◯ Microinverter	Solar Module #1 Quantity	Solar Module #2 Quantity	kW_{DC} Connected to each inverter: kW_{DC}	Continuous Rated Output of each inverter: kW_{AC}	Inverter is DC Limited ($kW_{DC} < kW_{AC}$) ◯ Yes ◯ No

*Aggregate kW_{AC} Power Output of all Inverters Constituting Distributed Generation Facility

Aggregate kW_{AC} power output of **first** inverter/solar module combination listed above (Quantity of inverters multiplied by either the Continuous Rated Output of each inverter (not DC limited) ***OR*** kW_{DC} Connected to each inverter (DC Limited)	kW_{AC}
Aggregate kW_{AC} power output of **second** inverter/solar module combination listed above (Quantity of inverters multiplied by either the Continuous Rated Output of each inverter (not DC limited) ***OR*** kW_{DC} Connected to each inverter (DC Limited)	kW_{AC}
Aggregate kW_{AC} power output of **third** inverter/solar module combination listed above (Quantity of inverters multiplied by either the Continuous Rated Output of each inverter (not DC limited) ***OR*** kW_{DC} Connected to each inverter (DC Limited)	kW_{AC}
Aggregate kW_{AC} power output of **fourth** inverter/solar module combination listed above (Quantity of inverters multiplied by either the Continuous Rated Output of each inverter (not DC limited) ***OR*** kW_{DC} Connected to each inverter (DC Limited)	kW_{AC}
Aggregate kW_{AC} Power Output of ALL Inverters Constituting Distributed Generation Facility	kW_{AC}

*INFORMATION FOR NON-INVERTER BASED ENERGY PRODUCTION EQUIPMENT

☐ Synchronous ☐ Induction ☐ Other

Rating (kW)	Rating (kVA)	*Rated Voltage Volts	*Rated Current Amps

System Type Tested? *(Total System)* ☐ YES ☐ NO *(attach product literature)*

*FOR SYNCHRONOUS MACHINES

NOTE: Contact utility 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 the Vee Curve ☐ Salient ☐ 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 Resister (if any) (ohms)

*FOR INDUCTION MACHINES

NOTE: Contact utility 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 *(No load)*	Stator Resistance (Rs) (ohms)	VARS *(Full load)*

Stator Reactance (Xs) (ohms)	Short Circuit Reactance (Xd) (ohms)	Phases ☐ Single Phase ☐ 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 *(if any)*

*INSURANCE DISCLOSURE

The attached terms and conditions contain provisions related to liability and indemnification and should be carefully considered by the interconnection customer. The interconnection customer shall carry general liability insurance coverage, such as, but not limited to, homeowner's insurance. The interconnection customer shall provide the utility with proof that it has a current homeowner's insurance policy or other general liability policy.

Proof of insurance must include:

1. Facility Address
2. Interconnection Customer as insured
3. General Liability Coverage

Proof of Homeowner's or General Liability Insurance attached ☐ YES

*OTHER FACILITY INFORMATION

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.

One Line Diagram attached ☐ YES

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.). The map or sketch should also denote the location of the electric meter and disconnect used to isolate the distributed generation facility.

Plot Plan attached ☐ YES

*CUSTOMER SIGNATURE

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

Applicant Signature *(signature must reflect Contact Name under section Interconnection Applicant Contact Information)*	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 UTILITY ENERGY USE ONLY

Date Received	Project ID

UTILITY ACKNOWLEDGEMENT

Receipt of application fee is acknowledged and this interconnection request is complete.

Utility Representative's Signature	Date

Printed Name	Title

Submit completed form to:

MidAmerican Energy Company
Attn: Private Generation
P.O. Box 4350
Davenport, Iowa 52808-9986

PrivateGeneration@midamerican.com
Fax: 563-336-3568