Application for Small Generator Facility Interconnection
Tier 2, Tier 3 or Tier 4 Interconnection

(See ARSD chapter 20:10:36 for the requirements for a Tier 2, Tier 3, or Tier 4 Interconnection.)

Applicant Contact Information:

Name: __________________________________________________________
Mailing Address: _________________________________________________
City: _____________________________ State: ______  Zip Code: __________
Telephone (Daytime): ________________ (Evening): ____________________
Facsimile Number: ________________________________________________
E-Mail Address: __________________________________________________

Address of Customer Facility Where Small Generator Facility will be Interconnected:
(if different from above)
Street Address: ___________________________________________________
City: _____________________________ State: ______  Zip Code: __________

System Installer/Consulting Engineer:

Name: __________________________________________________________
Mailing Address: _________________________________________________
City: _____________________________ State: ______  Zip Code: __________
Telephone (Daytime): ________________ (Evening): ____________________
Facsimile Number: ________________________________________________
E-Mail Address: __________________________________________________

Electric Service Information for Applicant’s Facility Where Generator Will Be Interconnected:

Capacity: _________ (Amps)  Voltage: _________ (Volts)
Type of Service: [ ] Single Phase  [ ] Three Phase
If Three-Phase Transformer, Indicate Type: [ ] Wye  [ ] Delta
Requested Procedure Under Which to Evaluate Interconnection Request:

Please indicate below which review procedure applies to the interconnection request.

☐ Tier 2 - Certified interconnection equipment with an aggregate Electric Nameplate Capacity of 2 MW or less. Indicate type of certification below. The application fee amount is ______________ ($50 plus $1 per KW of rated generation output up to a maximum of $500).

☐ Lab Tested -- tested to IEEE 1547.1 and other specified standards by a nationally recognized testing laboratory and is appropriately labeled.

☐ Field Tested – an identical small generator facility has been approved by the Public Utility under a Tier 4 study review process within the prior 36 months of the date of this interconnection request.

☐ Tier 3 – A Small Generator Facility connected to the EDS that does not export power. The Electric Nameplate Capacity rating must be 50 KW or smaller if connecting to an area network, or 2 MW or smaller if connecting to a radial distribution feeder. The application fee amount is ______________ ($100 plus $2 per KW of rated generation output up to a maximum of $1,000).

☐ Tier 4 – Electric Nameplate Capacity rating is 10 MW or smaller and the Small Generator Facility does not qualify for a Tier 1, Tier 2, or Tier 3 review or has been reviewed but not approved under a Tier 1, Tier 2, or Tier 3 review. Application fee amount is ______________ ($100 plus $2 per KW of rated generation output up to a maximum of $1,000).

Field Tested Equipment:

If the field tested equipment box is checked above, please include with the completed application the following information which will be required for review of Tier 2 field tested small generator facilities:

- A copy of the Certificate of Completion, signed by the Public Utility that has approved an identical small generator facility for parallel operation.
- A copy of all documentation submitted to the Public Utility that approved the Small Generator Facility for parallel operation under a Tier 4 study process.
- A written statement by the Applicant indicating that the small generator facility being proposed is identical, except for Minor Equipment Modification, to the one previously approved by the Public Utility for parallel operation.
- If a Tier 2 Application utilizing Field Tested equipment is proposed, the remainder of the application will not be required to be completed.

Small Generator Facility Information:

List interconnection components/system(s) to be used in the Small Generation Facility that is lab certified (required for Lab Tested, Tier 2 Interconnection requests only).
Component/System NRTL Providing Label & Listing
1. _____________________________________________________________
2. _____________________________________________________________
3. _____________________________________________________________
4. _____________________________________________________________
5. _____________________________________________________________

*Please provide copies of manufacturer brochures or technical specifications.*

**Energy Production Equipment/Inverter Information:**

☐ Synchronous ☐ Induction ☐ Inverter ☐ Other _________

Electric Nameplate Rating: ________ KW ________ kVA
Rated Voltage: _____________ Volts
Rated Current: _____________ Amps

System Type Tested (Total System): ☐ Yes ☐ No (attach product literature)

**For Synchronous Machines:**

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: __________

Min. 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

**For Induction Machines:**

Manufacturer: ____________________________________________
Model No.: ________________ Version No.: ____________________
Locked Rotor Current: ________ Amps
Rotor Resistance: (Rr)_____ohms  Exciting Current: _____Amps
Rotor Reactance: (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: (X'd) ohms
Phase: Single  Three-Phase

**Reverse Power Relay Information:** (This section applies to Tier 3 Review only.)
Manufacturer: __________________  Model: ______________________
Electric Nameplate Capacity rating: (kVA) ______________________

**Additional Information For Inverter Based Facilities:**

**Inverter Information:**
Manufacturer: __________________  Model: ______________________
Type: Forced Commutated  Line Commutated
Electric Nameplate Capacity Rated Output: _______  Amps  _______  Volts  _______  KW
Efficiency: _______ %  Power Factor: _______ %

**DC Source / Prime Mover:**
Solar  Wind  Hydro  Other _________________
Electric Nameplate Capacity Rating: _______  KW  Rating: _______  kVA
Rated Voltage: ________________ Volts
Open Circuit Voltage (if applicable): ________________ Volts
Rated Current: ________________ Amps
Short Circuit Current (If applicable): ________________ Amps

**Other Facility Information:**
Is Facility a Qualified Facility?  Yes  No
If yes, has Applicant completed FERC’s “Notice of Self Certification”?  Yes  No
One Line Diagram attached: Yes  No
Plot Plan attached: Yes  No
Installation Test Plan attached: Yes  No
Estimated Commissioning Date (if known): _________________________________
Applicant Signature:
I hereby certify that all of the information provided in this application request form is correct.

Applicant Signature: __________________________________
Title: ____________________ Date: ____________________

An application fee is required before the application can be processed. Please verify that the appropriate fee is included with the application:

**Application fee included:** ☐
Amount____________________
Tier 2, 3, or 4 Interconnection Request Acknowledgement

I hereby acknowledge the receipt of an Interconnection Request and Application Fee.

Approval for a Tier 2, Tier 3, or Tier 4 Small Generator Facility interconnection is contingent upon the Applicant’s Small Generator Facility passing the screens and completing the review process set forth in ARSD chapter 20:10:36 and is not granted by the Public Utility’s signature on this Application form.

Public Utility Signature: _________________________ Date: ________

Printed Name: _____________________Title: ____________________

Note: The Public Utility shall retain a copy of this completed and signed form and return the original and any attachments to the Applicant.

Please mail completed application to:
Luke Erichsen
MidAmerican Energy Company
106 E. 2nd Street
Davenport, IA 52801