1.0 REQUIREMENTS FOR INTERCONNECTION

1.1 Background on Interconnection Guidelines
This policy provides the application requirements for members (Owners) who have an interest of interconnecting distributed generators to the MiEnergy Cooperative (Cooperative) distribution. The distributed generators must be a qualifying facility under the rules of the Public Utility Regulatory Policies Act of 1978. This policy provides a summary of the interconnection guidelines that are covered in the Cooperative electric tariffs. Refer to the Cooperative Electric Tariff Section 25 for the complete rules and regulations regarding interconnection of distributed generators and information on qualifying facilities. Non-member requesting interconnection of distributed generation to MiEnergy Cooperative distribution will not be eligible for net metering and will be paid as a qualified facility under the rules of PURPA (avoided cost).

Under PURPA the interconnection facility site is one site only for all facilities owned by the same person(s) or its affiliates located within one mile of the interconnection facility for which application is sought. The distance between facilities shall be measured from the electrical generating equipment of a facility.

To the extent the owners wish to obtain net metering at the site, only one facility per site shall be eligible for net metering and the net metering credits, if any, shall be applied to the member’s load to which the facility is interconnected.

1.2 Application for Interconnection
The Cooperative requires that all DG owners file an Application for Interconnection (Schedule E at the end of this document) and pay accompanying fee not less than 30 days prior to the proposed date of interconnection. The Cooperative shall accept or reject the Application for Interconnection within 30 working days. Acceptance depends on the accuracy of information provided on the Application and on the DG owners proposed compliance with the National Electrical Code, the Cooperative’s Service Rules and Regulations, including the needed appropriate insurance documentation, and other local codes, which apply to co-generation and small power production facilities. If, in the Cooperative’s opinion, the proposed facility does not qualify, the Cooperative will provide the DG owner with a written explanation. Approval will be contingent on the engineering review by Cooperative’s Engineer.

1.3 Inspection
The DG owner is required to provide documentation to the Cooperative that the wiring complies with the National Electrical Code and other applicable local electrical codes. The DG owner is required to comply with all State and Local government inspection requirements.

1.4 Interconnection Costs
The DG owner shall reimburse the Cooperative for its costs resulting from interconnecting with the DG owner. The interconnection cost shall include all reasonable costs of connection, switching, special metering to measure the energy to and from the grid,
transmission, distribution, safety provisions, inspection, engineering studies, changes to the transformer, other costs to upgrade the service to allow for a connection of the DG system to the cooperative grid, service upgrade, and administrative costs incurred by the Cooperative directly related to the installation and maintenance of the physical facilities necessary to permit interconnected operation with the DG owner, to the extent such costs are in excess of the corresponding costs which the Cooperative would have incurred had it not interconnected. The interconnection fee is $400.00 and payable before interconnection. The interconnection fee is subject to change at any time subject to board approval.

1.5 **Grid Access Charge**
A qualifying facility may be assessed a monthly Grid Access Charge to recover the fixed costs not already paid by the member through the member’s existing billing arrangement. The additional charge shall be reasonable and appropriate for the class of member based on the most recent cost of service study defining the Grid Access Charge.

1.6 **Interconnection**
Interconnection is permitted only after all of the requirements stated in this application policy and the electric tariff section 25 are met and only after written authorization to interconnect is issued by the Cooperative. The member must also comply with the interconnection standards as set out in 199 IAC 15.10, as amended from time to time.

This authorization cannot be issued until all interconnection costs are paid and said authorization does not relieve the DG owner from the responsibility of installing, operating and maintaining the facilities in a responsible and safe manner.

If in the opinion of the Cooperative, the DG owner fails to abide by the terms and conditions of the interconnection agreement, including subsequent operation of the generating facilities in a non-qualifying manner, the Cooperative will no longer be obligated to operate in parallel and purchase any capacity and energy made available and may notify the DG owner to disconnect the generating facilities from the Cooperative’s system. In the event the DG owner fails to immediately comply with a disconnect notice, the Cooperative reserves the right to make such disconnection including the discontinuation of electric service if necessary.

1.7 **Expansion of DG Project**
If a member requests adding additional Distributed Generation kW to an existing approved and interconnected facility a second application for interconnection will be required. Interconnection costs and inspection fees will be subject to the engineering review and discretion of the Cooperative based on the size of the additional load. The addition must continue to comply with the Cooperative’s Tariff.

1.8 **Cooperative Access**
If the particular configuration of the DG owner precludes disconnection or testing from the Cooperative’s side of the interconnection, employees and authorized representatives of the Cooperative have the right to enter the DG owner’s property at any reasonable time to
ensure continued compliance with the Cooperative’s Safety and Operating Standards and the accuracy of its meters. Such inspection by the Cooperative shall not relieve the DG owner from the responsibility of installing, operating and maintaining the facilities in a responsible and safe manner.

1.9 Automatic Shutdown and Disconnection
In order to provide adequate safety to the Cooperative’s employees when performing certain operation and maintenance on the Cooperative’s system, it is essential that a means be available to automatically shut down and/or disconnect the DG owner from the system upon interruption of the Cooperative source voltage such that there is no possibility that the DG owner could backfeed through the service transformer and energize the primary distribution. The Cooperative will also require a voltage sensing breaker. The DG owner shall furnish and install an Underwriter's Laboratory (UL) listed manual disconnect switch which shall be located between the DG and the Cooperative’s system and readily be accessible by Cooperative personnel. The location of the switch shall be approved by the Cooperative and shall be housed in an approved enclosure which can be secured with a padlock or locking device.

2.0 SAFETY AND OPERATING STANDARDS

Safety and Operating Standards under which the Cooperative operates are imposed to protect Cooperative employees and the general public and are intended to guarantee a quality of service to all consumers. All DG owners’ facilities must be operated in a manner which will ensure the safety of Cooperative employees and the general public and must allow electric service to other consumers to remain within desired limits.

2.1 Isolation of Qualifying Facility
The Cooperative reserves the right to open the disconnect switch (i.e., isolating the DG) without prior notice for any of the following reasons:

a. A system emergency and/or maintenance operations requiring such action.

b. A potentially hazardous condition relating to the DG is discovered.

c. The operation of the DG interferes with the quality of service provided to other members and/or the operation of the Cooperative’s system.

d. Noise interference causing the Cooperative’s automated metering equipment to not work properly in an area.

2.2 Disclaimer
The Cooperative does not assume any responsibility for the safety and electrical protection of the DG owner’s facilities irrespective of the condition of the Cooperative’s facilities. The Cooperative shall not be liable to the DG owner for any damage to the DG owner’s facility, including damage caused by disconnection of the DG from the Cooperative’s system by automatic or manual devices or pursuant to the Safety and Operating Standards.
2.3 **Quality of Service**
Operation of the DG must not cause any reduction in the quality of service provided to other consumers nor interfere with the operation of the Cooperative’s system and equipment. The DG shall also be tested for excess voltage on the distribution system. The DG owner shall be responsible for taking whatever corrective action might be required and/or reimbursing the Cooperative for the cost of corrective action, which it deems necessary to restore service to desired limits.

2.4 **Electrical Characteristics**
The electrical characteristics of the DG shall conform to standards established by the Cooperative. The standards may include voltage, current, frequency, harmonics, and automatic synchronization. Wherever possible, the Cooperative will base its standards on industry wide standards. Acceptable standards are set forth in the Cooperative's Tariff Section 25.

2.5 **Power Factor**
The DG owner shall endeavor to operate the DG as near unity power factor as possible. For DG's with rated capacity above 40 kW, the Cooperative reserves the right to require the DG owner to install power factor correction equipment or reimburse the Cooperative for its cost of installing power factor correction equipment.

3.0 **METERING**
The Cooperative will meter the DG to obtain billing data. The following provides information on the metering requirements.

3.1 **Required Metering**
The DG owner shall pay for the incremental costs for the metering installed by the Cooperative. The DG owner may install additional metering equipment for the collection of data for research purposes. The Cooperative will supply such research metering equipment and the DG will pay all associated operation and maintenance. Two meters are required for all DG applications, one to measure 100% of the production, and another for usage (net metering) and/or delivery to the Cooperative. The meter measuring the production of the DG is required by the Cooperative for compliance filings and should not be interpreted as a requirement that the total production be sold to the Cooperative.

No submetering for incentive retail rates shall be permitted for members with a DG facility.

The Cooperative and the Member shall consult with one another concerning the location and design of the meters, with the Cooperative being provided an enhanced metering diagram showing how the meter is to be wired and installed.

3.2 **Meter Reading**
The Cooperative’s automated meter reading system can provide monthly meter readings. However, monthly meter readings are required from all Consumer classifications and the
DG could prohibit the AMR from normal readings. Monthly meter readings are the responsibility of the member, unless it is determined by the Cooperative that there is special equipment that requires reading by the Cooperative.

4.0 SERVICE CONDITION

The furnishing and taking of service hereunder shall be subjected to the Service Rules and Regulations and line extension rules of the Cooperative. Such Service Rules and Regulations are subject to change from time to time by superseding schedules as published by the Cooperative.

5.0 INSURANCE

The DG owner, at its sole cost and expense, shall obtain and maintain an insurance policy that provides liability insurance covering the operation of the DG and its associated equipment of not less than General Liability insurance as follows: less than 40kW $300,000 minimum; 40-250 kW $1,000,000 minimum; larger that 250kW $2,000,000 minimum. For facilities 40kW and larger, the insurance policy shall include the Cooperative as an additional insured. Satisfactory evidence of such insurance shall be provided to the Cooperative before the DG will be allowed to operate with the disconnect switch in the closed position. The DG owner shall notify the Cooperative of any policy changes and of the periodic policy renewals. Proof of insurance needs to be provided to the Cooperative annually.

6.0 ATTORNEY'S FEES

If a suit or action is instituted by either of the parties to enforce any of the provisions of this Agreement, the prevailing party in such suit or action shall be reimbursed for its reasonable attorney's fees.

7.0 APPLICATION FEES

0-10kW-$150.00; 10.01-40 kW $450.00; 40.01-99 kW $750.00; Larger kW units will be based on the actual cost of the engineering study. The DG Owner shall also pay any applicable sales tax related to the above fees.

8.0 INDEMNIFICATION/HOLD HARMLESS

The DG Owner agrees to indemnify, and hold the Cooperative and its directors, officers, and employees harmless from all claims of whatever nature and kind arising out of or resulting from the DG Owner's operation of its DG facility. DG Owner agrees to defend and pay all costs, including reasonable attorney's fees, in defending any third-party claims for which an indemnification obligation exists under this Agreement. Without limiting the foregoing, the DG Owner shall specifically hold the Cooperative harmless from any stray voltage claims arising from or attributed to the DG Owner's facility.
SCHEDULE E

MiEnergy Cooperative
Cresco, IA 52136
Application for Interconnection
Member Owned Distributed Generation

___________________________, 20 ___
(Application Effective Date)

(DG owner Name)    (Member Acct. #)    (Location Meter # required)

(DG Owner Mailing Address)    (Phone #)    (Cell Phone #)

.getAddress and Location Information of the Generating Device)

Manufacturer of Qualifying Facility: ________________________________

Nameplate DC Rating: ________________________________

UL or Other Approving Authority: ________________________________

Energy Source: ________________________________

Type of Generator: ________________________________

Inverter Information: ________________________________

Operational Data:

1. _________ Voltage
2. _________ Phase (single, three phase)
3. _________ Amperage
4. _________ % Power Factor

Copy of Manufacturer Technical Specifications must be attached: Yes ___ No ___

Contact Information of Electrician: ________________________________

Name, Address, Cell Phone #

Contact Information of Vendor Selling or Installing the DG Project: ________________________________

Maryland Energy Cooperative
Cresco, IA 52136
Application for Interconnection
Member Owned Distributed Generation

___________________________, 20 ___
(Application Effective Date)

(DG owner Name)    (Member Acct. #)    (Location Meter # required)

(DG Owner Mailing Address)    (Phone #)    (Cell Phone #)

(Address and Location Information of the Generating Device)

Manufacturer of Qualifying Facility: ________________________________

Nameplate DC Rating: ________________________________

UL or Other Approving Authority: ________________________________

Energy Source: ________________________________

Type of Generator: ________________________________

Inverter Information: ________________________________

Operational Data:

1. _________ Voltage
2. _________ Phase (single, three phase)
3. _________ Amperage
4. _________ % Power Factor

Copy of Manufacturer Technical Specifications must be attached: Yes ___ No ___

Contact Information of Electrician: ________________________________

Name, Address, Cell Phone #

Contact Information of Vendor Selling or Installing the DG Project: ________________________________
SCHEDULE E (CONTINUED)

MiEnergy Cooperative
Cresco, IA 52136
Application for Interconnection
Member Owned Distributed Generation

Description of Interconnection Equipment, including location of manual disconnect switch:

_____________________________________________________________________________

_____________________________________________________________________________

_____________________________________________________________________________

_____________________________________________________________________________

Proposed Interconnection Date: ________________________, 20___

Estimated Site Energy Consumption: _______ kWh _______ kWh _______ kWh
       June-Aug       Sept-May       Annual

Estimated Site Energy Production: _______ kWh _______ kWh _______ kWh
       June-Aug       Sept.-May       Annual

Estimated Site Demand:  _____________kW Average/Month

Estimated Site Generation:  _____________kW Average/Month
   (If capable of supplementing firm power.)
SCHEDULE E (CONTINUED)

MiEnergy Cooperative
Cresco, IA 52136
Application for Interconnection
Member Owned Distributed Generation

Customer is to provide a one-line diagram similar to the example shown below:
SIGN OFF AREA

With this application, we are requesting the Cooperative to review the proposed Generation System Interconnection. We request that the Cooperative identify the additional equipment and costs involved with the interconnection of this system and to provide a budgetary estimate of those costs. We understand the estimated cost supplied by the Cooperative, will be estimated using the information provided. We also agree that we will supply, as requested, additional information, to allow the Cooperative to better review this proposed Generation System Interconnection. We have read the summary of the requirements for a customer to interconnect DG equipment to the electric distribution from above and understand the entire requirements for interconnections are available from the section 25 electric tariff from the Cooperative. We will design the Generation System and Interconnection to meet the Cooperative interconnection requirements.

Applicant Name (print):
Applicant Signature: Date:

Attach a single line diagram showing the electric panels, generator protection, inverters and disconnect switches.

Send the completed application information to the following Cooperative contact:

Pat Boyle
MiEnergy Cooperative
24049 State Highway 9
P.O. Box 90
Cresco, IA 52136

ADOPTED: April 29, 2009
EFFECTIVE: January 1, 2018
AMENDED: December 27, 2017
May 30, 2018

Policy Approved: This policy was approved by the MiEnergy Cooperative Board of Directors at their board meeting held on May 30, 2018.