

**DISTRIBUTED GENERATION CUSTOMER APPLICATION POLICY****1.0 REQUIREMENTS FOR INTERCONNECTION****1.1 Background on Interconnection Guidelines**

This policy provides the application requirements for customers (Owners) who have an interest of interconnecting distributed generators to the Hawkeye REC (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.

**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) not less than 30 days prior to the proposed date of an 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, 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.

**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, metering, transmission, distribution, safety provisions, inspection, engineering studies 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.

**1.5 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. This authorization cannot be issued until all interconnection costs are paid and 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 his generating facilities in a non qualifying manner, the Cooperative will no longer be

**DISTRIBUTED GENERATION CUSTOMER APPLICATION POLICY**

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.

**1.6 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.

**1.7 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 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 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 customers and/or the operation of the Cooperative's system.

**DISTRIBUTED GENERATION CUSTOMER APPLICATION POLICY****2.2 Disclaimer**

The Utility 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 Single Phase Limitations**

The rated capacity of the DG to be connected in parallel with a low voltage service shall be no greater than 10 kW for single phase installations, unless authorized in writing by the Cooperative consistent with the Cooperative's limitation for single phase motors. Single phase installations greater than 10 kW will be permitted if engineering calculations indicate that the installation will not adversely affect the operating characteristics of the Cooperative's system.

**2.4 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. 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.

**2.5 Electrical Characteristics**

The electrical characteristics of the DG shall conform with 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.

**2.6 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 50 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 furnish such research metering equipment and the DG will pay all associated operation and maintenance.

**3.2 Small Generators with Nameplate Ratings less than 40 kW**

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The Cooperative may allow the meter to turn backwards. Refer to the DG-1 rate rider for more information.

**3.3 Meter Reading**

Monthly meter readings are required from all Consumer classifications. 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 his sole cost and expense, shall obtain and maintain a insurance policy that provides liability insurance covering the operation of the DG and its associated equipment of not less than General Liability insurance in the amount of \$300,000 per occurrence or greater, and property loss insurance in the amount of \$300,000 or greater. 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.

**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, except that a DG owner will be required to pay the costs, disbursements, and attorney's fees of the Cooperative only if the Commission finds that the claims of the DG owner have been made in bad faith or are a sham or frivolous.

**DISTRIBUTED GENERATION CUSTOMER APPLICATION POLICY**

**SCHEDULE E**

**Hawkeye REC  
Cresco, IA 52136  
Application for Interconnection  
Member Owned Distributed Generation**

\_\_\_\_\_, 20 \_\_\_\_  
(Application Effective Date)

\_\_\_\_\_  
(DG owner Name)

\_\_\_\_\_  
(Member Number)

\_\_\_\_\_  
(DG Address and Location Information)

Manufacturer of Qualifying Facility: \_\_\_\_\_

Nameplate 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 attached: Yes \_\_\_ No \_\_\_

**DISTRIBUTED GENERATION CUSTOMER APPLICATION POLICY**

**SCHEDULE E (CONTINUED)**

**Hawkeye REC  
Cresco, IA 52136  
Application for Interconnection  
Member Owned Distributed Generation**

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

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Proposed Interconnection Date: \_\_\_\_\_, 20 \_\_\_\_

Estimated Site Energy Consumption: \_\_\_\_\_ kWh \_\_\_\_\_ kWh \_\_\_\_\_ kWh  
May-Oct Nov-Apr Annual

Estimated Site Energy Production: \_\_\_\_\_ kWh \_\_\_\_\_ kWh \_\_\_\_\_ kWh  
May-Oct Nov-Apr Annual

Estimated Site Demand: \_\_\_\_\_ kW Average/Month

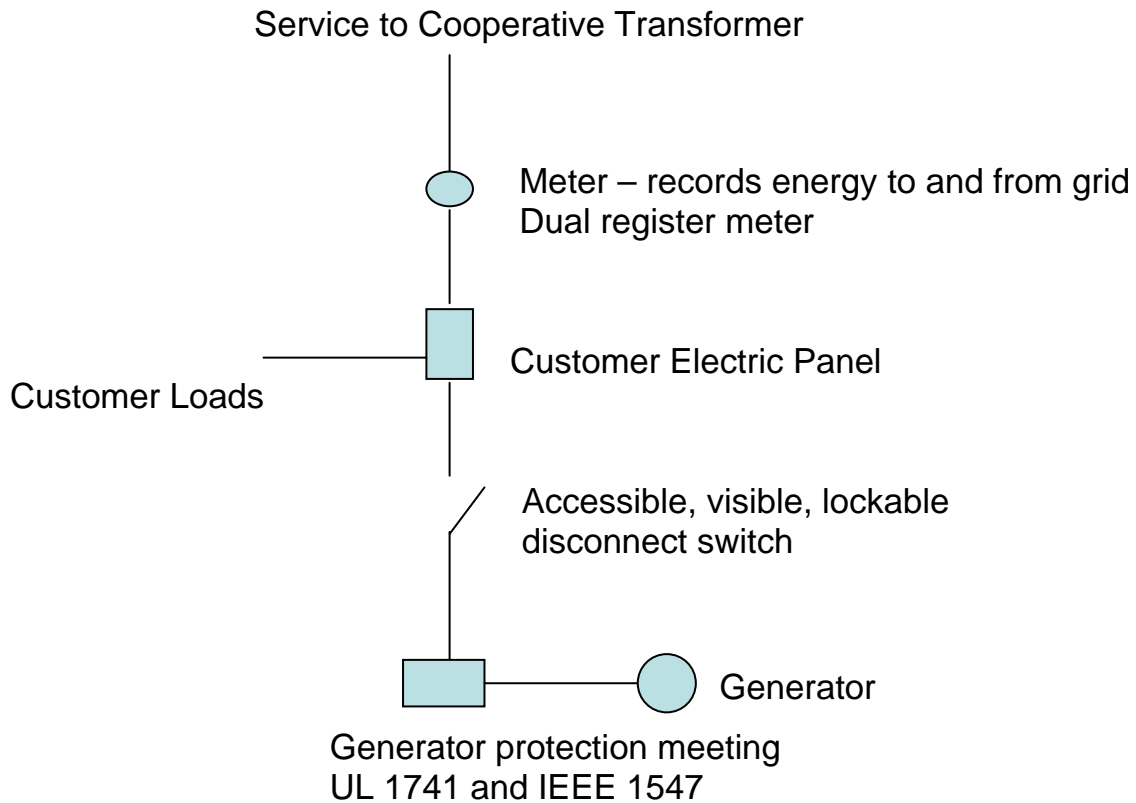
Estimated Site Generation: \_\_\_\_\_ kW Average/Month  
(If capable of supplementing firm power.)

**DISTRIBUTED GENERATION CUSTOMER APPLICATION POLICY**

**SCHEDULE E (CONTINUED)**

**Hawkeye REC  
Cresco, IA 52136  
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Customer is to provide a one-line diagram similar to the example shown below:



**DISTRIBUTED GENERATION CUSTOMER APPLICATION POLICY**

**SCHEDULE E (CONTINUED)**

**Hawkeye REC  
Cresco, IA 52136  
Application for Interconnection  
Member Owned Distributed Generation**

<b>SIGN OFF AREA</b>	
<p>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.</p>	
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  
Hawkeye REC  
24049 State Highway 9  
P.O. Box 90  
Cresco, IA 52136

**ADOPTED:** April 29, 2009

**REVISED:**

**Policy Approved:** This policy was approved by the Hawkeye REC Board of Directors at their regular board meeting held on April 29, 2009.