

Vernon Electric Cooperative  
Westby, WI

## **Distributed Generation**

### Information & Requirements

#### **POLICY 30-24**

**SUBJECT** - Renewable Energy / Distributed Generation (DG)

#### **POLICY CONTENT:**

##### AVAILABILITY

This rate is available only for Members of Vernon Electric Cooperative who own / operate renewable electric generation facilities that are interconnected with the Cooperative's system who generate a portion or all of their own retail electricity from renewable energy resources as defined herein. This shall include single-phase and three-phase service where such facilities have a total generating capability of 40 KW or less, and where such facilities are connected in parallel with the cooperative, and where such facilities are approved by the cooperative. For applications larger than 40 KW Dairyland Power may be considered as a primary source for interconnection. The cooperative in general may utilize the Wisconsin Public Utilities (PSC) 119 rules, forms, agreement, application, the provisions of this policy and other criteria for any and all DG and Renewable Energy interconnect requests and approvals.

##### RENEWABLE ENERGY

Service under this policy is limited to Members of the Cooperative who own/operate renewable energy sourced electric generating technologies, further defined as "energy generated by solar, wind, geothermal, biomass (organic materials such as; wood, crops, and waste) or hydroelectric only."

##### NET METERING / BILLING / RATE

Net metering / billing under this policy is an accounting mechanism whereby members of the cooperative who generate a portion or all of their own retail electricity (energy) and have the capability to sell excess energy (if any) back to the cooperative under this policy, shall receive a billing credit equal to the Cooperative's retail energy rate times the metered kilowatt hours delivered to the Cooperative. Vernon Electric Cooperative's retail rate, as approved by the Cooperative's Board of Directors, shall be used for billing purposes. The consumer shall be billed monthly on a net energy/billing basis, and shall pay the fixed charge and energy charge specified in the rate schedule under which he or she is served. If any member shows amounts owing from the Cooperative resulting from the use of this policy, shall be settled on an annual basis.

##### METERING AND SERVICE FACILITIES

A Member eligible for net energy billing, but with existing metering facilities equipped with ratchets or other devices preventing reverse registration (i.e., time-of-day metering facilities) may request that the Cooperative install the necessary metering to permit such billing. In such cases, the cost for the metering installation and associated wiring, equipment, materials and labor, shall be borne by the Member.

## SAFETY, SYSTEM PROTECTION AND POWER QUALITY RULES OF INTERCONNECTION

The DG facilities shall be installed in a manner consistent with the rules specified below. These rules may be revised by the Cooperative at any time.

a. Interconnection of Member's generating installation with the Cooperative power system is not permitted until proper application has been made to and approval received from the Cooperative. The Cooperative may withhold approval only for good reason such as failure to comply with applicable Cooperative or governmental rules or laws. The Member shall sign a contract specifying reasonable technical connection and operating aspects for the DG facility.

b. Where necessary, for reasons of public or employee safety or the potential for a DG facility causing problems with the service of other Members, the Cooperative may require a separate distribution transformer(s) for a Member having a DG facility. Ordinarily this requirement should not be necessary for an induction-type generator with a capacity of 5 KW or less, or other units of 10 KW or less that utilize line-commutated inverters.

c. Where necessary, to avoid the potential for a DG facility causing problems with the service of other Members, the Cooperative may limit the capacity and operating characteristics of single-phase generators in a manner consistent with the Cooperative limitations for single-phase motors. Ordinarily, single-phase generators should be limited to a capacity of 10 KW or less.

d. The Member's facility must have a system for automatically isolating the generator from the Cooperative's system upon loss of the Cooperative supply. Paralleling equipment must be certified by a nationally recognized testing laboratory, meeting testing requirements of UL1741.

e. The Cooperative may require that there be provided between the DG and the Cooperative system a lockable load-break disconnect switch. For installations interconnected at greater than 600 volts a fused cutout switch may be substituted, where practicable. The switches must be accessible to the Cooperative for the purpose of isolating the parallel generator's equipment from the Cooperative system when necessary.

f. The Cooperative may discontinue DG generation operations and isolate the generating installation from the Cooperative's system for any of the following reasons:

1. To facilitate maintenance or repair of Cooperative facilities.
2. During system emergencies and to protect life and limb as a normal course of action

3. At such times as the consumer's equipment is operating in a hazardous manner, or is operating such that it adversely affects service to other members or to nearby communications systems or circuits.
4. Non-compliance with technical, contract/agreement and/or current policy requirements.
  - g. The Member shall make equipment available and permit entry upon the property by electric Cooperative and communication utility personnel at reasonable times for the purposes of testing isolation and protective equipment and evaluating the quality of power delivered to the Cooperative's system; and testing to determine whether the local generating system is the source of any electric service or communication systems problems.
  - h. The power output of the consumer must be maintained such that frequency and voltage are compatible with normal Cooperative service and do not cause that service to fall outside the prescribed limits of the Wisconsin Public Service Commission rules and other standard limitations.
  - i. The Member's installation must be operated so that variations from acceptable voltage levels and other service impairing disturbances do not result in adverse effects on the service or equipment of other consumers, and in a manner that does not produce undesirable levels of harmonics in the Cooperative power supply.
  - j. The Member is responsible for providing protection for the installed equipment and must comply with all applicable national, state, and local codes. The design and configuration of certain DG equipment sometimes requires an isolation transformer as part of the DG installation for safety and protection of the DG equipment.

#### CONTRACT/AGREEMENT

The cooperative may require a contract/agreement by and between the Member and the Cooperative specifying technical and operating aspects of Distributed Generation.

#### LIABILITY OF THE PARTIES

Each of the parties shall indemnify and hold harmless the other party against any and all damages to persons or property occasioned, without the negligence of such other party, by the maintenance and operation by such parties of their respective lines and other electrical equipment. Members requesting an interconnect under this policy shall provide a certificate of insurance prior to energizing a DG facility. This policy will also include minimum liability insurance determined by the Cooperative and notwithstanding any other provision of the policy, no policy shall be cancelled, expire or changed in a material way by the insurer without thirty (30) days prior written notice to Vernon Electric Cooperative. The insurance provision in this policy supercedes section 119.05 (Insurance) of the Wisconsin PSC 119 rules.

#### DISCLAIMER

Information contained in this Policy is subject to update or modification by Vernon Electric Cooperative at any time and at the sole discretion of Vernon Electric Cooperative. Such information

includes (but is not limited to) policies, procedures, rates, tariffs and applications. Some information may change as a result of external factors such as new legislation or regulations. Prior to making use of the information contained herein, please check with appropriate Vernon Electric staff.

For the above reasons, Vernon Electric requests that the recipient NOT reproduce or distribute this document, or rely solely on its contents to make any business or personal decisions regarding renewable energy resources.

Approved Board of Directors  
June 27, 1994

Policy Withdrawn  
May 24, 2006

Policy Revised & Approved: Board of Directors  
April 27, 2007  
June 27, 2007 – DPC Policy Provision Adaptation  
May 30, 2008 – Revised  
July 29, 2009 – Revised  
August 26, 2009 – Revised  
October 28, 2010 – Revised