



## GUIDELINES FOR CONSUMER OWNED ELECTRICAL GENERATORS WITH UTILITY INTERCONNECTION

**SAFETY NOTE:** *Do not attempt to interconnect any privately owned generation equipment before involving your utility. This may create an extremely dangerous condition for both you and utility line workers. Also, standard electric billing does not “turn backwards” so you will be unable to sell power back to Crow Wing Power unless the proper equipment and meters are installed.*

### **-ARE YOU INTERESTED IN GENERATING YOUR OWN POWER?**

Privately owned electrical generators may be interconnected with an Electrical Utility, like Crow Wing Power (see Safety Note above). These can use renewable energy sources such as wind or solar.

For a system of under 40 kw capacity, the consumer will work directly with the Distribution Utility (CWP) to interconnect. Crow Wing Power has established policies and procedures in conformance with requirements from the State of Minnesota to handle interconnection of consumer generated electricity. For larger systems, the Generation Utility will also be included in the process.

### **-HAVE YOU DONE YOUR HOMEWORK?**

If you are considering a privately owned electrical generator, here's a partial listing of organizations and agencies that have additional information that may be useful to you:

Crow Wing Power:

<http://www.cwpower.com/>

Minnesota Department of Commerce: (for state information on solar and wind)

<http://www.state.mn.us/portal/mn/jsp/home.do?agency=Commerce>

American Council for an Energy Efficient Economy:

<http://www.aceee.org/>

Great River Energy: (Crow Wing Power's Generation Utility)

[http://www.greatriverenergy.com/lmg/lmg\\_main.html](http://www.greatriverenergy.com/lmg/lmg_main.html)

Rocky Mountain Institute: (information on alternative energy)

<http://www.rmi.org/>

U.S. Department of Energy:

<http://www.eere.energy.gov/>

Rural Renewable Energy Alliance: (information on solar energy)

<http://www.rreal.org/>

Tax Incentives Assistance Project: (information on the Energy Policy Act of 2005)

<http://www.energytaxincentives.org>

American Wind Energy Association: (for small wind producers)

<http://www.awea.org/>

Solar Energy International: (for solar energy information)

<http://www.solarenergy.org/>

WERC – Winkelman's Environmental Responsible Construction – (wind & solar installations)

<http://www.ecowerc.com/>

## **-IF YOU ARE READY TO TAKE THE PLUNGE, HERE'S THE PROCESS FOR INTERCONNECTING YOUR GENERATOR**

In compliance with Minnesota adopted Rules Regulating Cogeneration and Small Power Production Chapter 7835, Crow Wing Power will interconnect with and purchase electricity from cogenerators and small power producers which satisfy the conditions of a Qualifying Facility (QF).

For 2011, the average buy-back rate for small residential power producers was \$0.1070/kwh.

Any disputes over interconnection, sales and purchases of consumer generated electricity are subject to resolution by the Minnesota Public Utilities Commission.

In general, here's a summary of the steps necessary to interconnect a consumer owned electrical generation project onto CWP's distribution system:

1. Application (available from Crow Wing Power)
  - Information provided includes an application form and technical requirements.
  - Applicant must supply engineering data to include one-line diagram showing protective relaying, site plan and generator information.
2. Preliminary Review of Application by Utility
  - Your application is reviewed by CWP. Review is completed within 15 business days.
  - If application is denied, a written response is supplied.
3. Engineering Study (after preliminary review)
  - If required, this is at the applicant's cost.
4. Applicant Meeting
  - The application is reviewed with applicant. Costs, engineering and other details such as insurance requirements are reviewed.
  - If there are no changes to the application, an interconnection agreement is signed.
5. Final Go-Ahead
  - Signed agreements are in place and up-front costs are paid to CWP.
  - Both parties can purchase equipment and/or start construction.
6. Testing and Formal Acceptance
  - Once construction is completed, a field inspection is made by Crow Wing Power and required meters are set.
  - NOTE: Systems not matching the voltage and frequency supplied by Crow Wing Power will not be connected.
  - "As-Built" drawings are provided.
  - Once inspection is approved by CWP, a formal letter of acceptance is drafted and sent to the member.

## **-MORE QUESTIONS?**

You can contact Crow Wing Power to learn more about the interconnection process and get the needed documents. Jeff Wohlert and Rick Pederson will be happy to assist you in this. Their phone numbers are 1-800-648-9401 or (local) 829-2827.