# **Distributed Generation**

Distributed generation (DG) includes standby generation, new technologies such as fuel cells and micro-turbines, as well as renewable energy sources such as wind, solar, hydro, and bio-mass. DG provides members with greater reliability, improved environmental performance, and economic savings. To be a qualifying facility (QF), agreements, state inspection, and approved interconnection of the DG with the electric grid (Barron Electric's distribution lines) are required for the safety of the member and the cooperative.

### **Standby Generation - Discount Rate**

Power to a home or business can be vulnerable to power outages during unpredictable weather or extreme weather conditions. Standby power generators offer the security of uninterrupted electricity. With an automatic standby generator on Barron Electric's Load Management Program, members receive a discounted kWh rate whether the account is a residence or small or large business, new or existing.\*

A Standby Generation Loan Program exists for the purchase and installation of a standby generator. Maximum funds allowed: \$50,000 per installation per member; 5% interest rate per year on unpaid balance, and loan payment will be added to monthly electric bill. Loans greater than \$10,000 will require an irrevocable letter of credit.

# Connectivity Requirements for Standby Generation

- Signed agreement
- Equipment must meet all stated Federal code requirements
- Install an automatic transfer switch device (double pole, double-throw)
- Complete transfer of load between systems
- Controlled by the Load Management Program
- Maintain a 24-hour fuel supply
- Subject to approval and yearly inspection
- Comply with EPA emission standards and rules

A penalty is assessed for failure to interrupt. Members on this rate are not eligible for incentives or capital credits.

\* Discounted rate subject to change.

# Renewable Co-generation Net Metering through Barron Electric

Energy re-purchased by Barron Electric with 40 kW or less of installed capacity shall be metered at a single meter point. Typical examples would be wind, solar or other renewable resources of distributed generation. The co-op will credit the member the current rate per kWh. The co-op will bill the member the current monthly facilities charge (*subject to change*). Excess generation will be credited at the "avoided cost" as determined by the wholesale power supplier, Dairyland Power Cooperative, on a monthly basis.

# Connectivity Requirements for Renewable Co-generation

- ♦ Measured demand in 15-minute intervals of 40 kW per residential site, not to exceed a total of 80 KW per member.
- ♦ Signed Distributed Generation Application Form
- ♦ Signed Interconnection Agreement
- ♦ One meter socket required
- ♦ \$300,000 liability insurance coverage
- ♦ Install an IEEE approved interconnect safety switch to monitor the phases and prevent the power from back-feeding onto the grid
- ♦ Provide a lockable load-break disconnect switch at the meter site
- ♦ Provide an energy conversion system to convert the DC battery current to 120-volt AC house current
- Meet all equipment and wiring State and National electric codes and provide certificate of compliance through an electrical inspection. Cost paid by member
- ♦ Subject to inspection by Barron Electric Cooperative
- ♦ Conditions apply

Barron Electric is committed to equitable rates for all consumer classes, optimal efficiency of facilities and resources, and energy conservation.

#### Wind & Solar Site Assessments

This program supports research and development of financially viable small-scale wind and solar renewable energy projects, 40KW or less. Members receive a 50% rebate, up to \$200, for a site assessment performed by a MREA certified assessor for a small-scale renewable energy project. Contact Barron Electric for more details.

# **Sources for Renewable Energy**

American Wind Energy Association.	www.awea.org
Dairyland Power Cooperative	www.dairynet.com
Energy Information Administration	www.eia.doe.gov
National Renewable Energy Lab	www.nrel.gov
Windustry	www.windustry.org
Renewable Energy World	. www.renewableenergyworld.com
Environmental Protection Agency	www.epa.gov/energy

### State Programs

State Incentives for Renewables and Efficiency ....... www.dsireusa.org

# Federal Programs

U.S. Department of Agriculture Rural Development: www.rd.usda.gov/programs-services/value-added-producer-grants

Rural Economic Development Loan and Grant Program: www.rd.usda.gov/programs-services/rural-economic-development-loan-grant-program

For more information, contact
Barron Electric's Member Services Department
800-322-1008
memberservices@barronelectric.com
1-2024

# Distributed Generation Program



Barron Electric Cooperative is committed to improving the quality of the environment and contributing to the overall economic and social health of its service territory. The cooperative is dedicated to continued stewardship, as well as investing in technology that protects the environment, adheres to sound management practices, and ensures the health and safety of its employees and members.

