

Since earliest recorded history, wind power has been used to move ships, grind grain, and pump water. Today, wind power is also being used to provide electricity to homes, schools, businesses, and entire communities. Wind power was the fastest growing source of electricity generation in the world in the 1990s. More than half the United States have wind resources that could support the development of utility-scale wind power plants.

Wind Symposium 2000

Faculty members at Montana State University (MSU) and other state advocates are organizing a statewide Wind Symposium to be held in early summer 2000. The goals of this conference are to bring together wind advocates from across Montana to explore opportunities to promote wind power development in the state. Organizers will also bring in key wind experts from across the country to assist in addressing key issues and to provide wind education. To become involved or for more information, contact Dr. John Mandell at (406) 994-4543.

Green Power

"Green power" is power produced by renewable or environmentally friendly energy sources, as distinct from power produced by fossil fuel, nuclear, and other types of generators. Customers can arrange to purchase a certain amount of green power (actually energy, in kilowatt-hours [kWh]) per month, for which they commonly pay a small premium to completely or partly offset any higher cost of renewable power sources. The policy of transferring these costs to green power customers is called "green pricing."

Flathead Electric Cooperative, which serves 47,000 customer accounts throughout Northwest Montana, announced that it has entered into a two-year contract with Bonneville Power Administration (BPA) to purchase 1 megawatt (MW) of "environmentally preferred" power. Beginning October 1, 1999, BPA will provide the cooperative with electricity from its standard green

power mix, which is a blend of new wind power from the Arlington, Wyoming, wind project and small hydro resources (under 30 MW). Flathead plans to give all of its customers the option of purchasing the green power at a premium of 2¢/kWh and will begin marketing the program in August.

State Financial Incentives

Montana taxpayers involved in the production or use of wind-generated electricity or the manufacture of wind energy generating equipment, are entitled to a state tax credit of 35% of their investment of \$5,000 or more in depreciable property of a wind energy generation system located in Montana, less the value of any state or federal government grants received. The tax credit must be taken the year the equipment is placed in service; however, any portion of the tax credit that exceeds the amount of tax to be paid may be carried over and applied against state tax liability for seven years following. Taxpayers may not take this credit in conjunction with any other state energy or state investment tax benefit, or with the property tax exemption for nonfossil energy property.

Net Metering

The concept of net-metering programs is to allow the electric meters of customers with generating facilities to turn backwards when their generators are producing more energy than the customers' demand. Net metering allows customers to use their generation to offset their consumption over the entire billing period, not just instantaneously. This offset would enable customers with generating facilities to receive retail prices for more of the electricity they generate.

In 1999, the Montana state legislature adopted legislation (SB 409) requiring all investor-owned utilities in the state to offer net metering to customers with solar, wind, and hydroelectric systems of 50 kilowatts or less. All classes of customers are eligible to receive net metering and there is no statewide limit.



What is the installed wind energy capacity in the United States?

By January 2000, the total U.S. installed wind energy capacity was 2500 MW. (See <http://www.awea.org/faq/instcap.html>) That's enough electricity to meet the needs of 600,000 to 800,000 typical U.S. homes.



Montana

Additional Resources

National Renewable Energy
Laboratory
National Wind Technology Center
1617 Cole Boulevard
Golden, Colorado 80401
(303) 384-6979
www.nrel.gov/wind

U.S. Department of Energy
Denver Regional Support Offices
1617 Cole Boulevard
Golden, Colorado 80401
(303) 275-4826
<http://www.eren.doe.gov/dro/>

U.S. Department of Energy
Wind Energy Program
Forrestal Building
1000 Independence Ave., S.W.
Washington, D.C. 20585
(202) 586-5348
www.eren.doe.gov/wind

American Wind Energy
Association
122 C Street, NW, 4th Floor
Washington, D.C. 20001
phone (202) 383-2500
fax (202) 383-2505
www.awea.org

Customers can apply the credit for electricity generated from their system to the following month; however, at the end of each calendar year, any excess generation is granted to the utility.

State Summary

In-State Wind Energy Potential:
**299,600 MW after land use and
environmental exclusions**
**530 billion kWh per year electric
energy**

Key Contacts

The Montana Power Company
40 East Broadway Street
Butte, Montana 59701
David N. Ryan, PE, CEM
Senior Distribution Engineer
(406) 497-2322
dnyan@mtpower.com

National Center for Appropriate
Technology
Dale Horton
dhorton@ncat.org

Department of Environmental Quality
Georgia Brensdaahl
(406) 444-6750
gbrensdal@state.mt.us

Montana State University
Dr. John Mandell
johnm@coe.montana.edu
(406) 994-4543



Produced for the U.S. Department
of Energy by the National
Renewable Energy Laboratory,
a DOE national laboratory

DOE/GO-102000-1002
April 2000

Printed with a renewable-source ink on paper
containing at least 50% wastepaper, including
20% postconsumer waste