

WATT'S HAPPENING

SCENIC RIVERS ENERGY COOPERATIVE

LANCASTER, DARLINGTON AND GAYS MILLS, WISCONSIN



DAIRYLAND POWER
COOPERATIVE

Cooperative's Large Scale Renewable Energy

Americans today are strongly supportive of increased electric energy production from renewable resources. Scenic Rivers Energy Cooperative members, Board of Directors, management and employees share this interest in renewable energy. There has also been an increase in national and state legislative and other initiatives to encourage increased utility use of energy from renewable resources. Members are also exploring opportunities for meeting a portion or all of their electrical requirements through on-site distributed generation. Such distributed generation can provide benefits to individual customers and the Dairyland system.

Dairyland evaluates large scale renewable resource options within the context of overall integrated resource planning which may include adding renewable resources through Dairyland ownership of such facilities, wholesale purchases from third parties, member cooperative ownership and purchases from customer owned renewable generation.

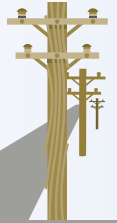
Dairyland has several renewable projects using various technologies operating as part of their generation mix or in the planning stages, including:

- Hydropower
- Wind Power
- Land fill gas
- Manure digesters
- Biomass to energy

Because of Dairyland's leadership role in development of renewable energy related to agriculture, they have been part of the discussion of a project called "25 X 25," a coalition of agriculture and forest leaders promoting expanded use of rural resources to help meet our domestic energy needs. The 25 X 25 coalition supports a goal of 25% of all energy coming from the farms and forests of America by 2025. Dairyland Power Cooperative agrees that a long-term goal of 25% for all energy sources can be a useful way to push science, industry and government forces to explore new ways to utilize farm and forest products to support this important shift in power reduction.

Continued. .

Questions on the line



I am interested in a small-scale renewable energy system at my house, what should I do?

Research, Research and Research some more. Find out all the available opportunities for your location. Then call Scenic Rivers Energy Cooperative at 800-236-2141 ext. 105 and ask for a packet of information. Our packet will give you the rules for interconnecting to our grid, an Application for Distributed Generation, an Electric Service Agreement and a preview on what Focus on Energy offers our members for renewable projects.

FYI-

Like a good neighbor, Scenic Rivers Energy Cooperative helped a neighboring cooperative survive the winter weather. Four of our linemen went to Jo Carroll Energy Cooperative in northwestern Illinois to help recover from an ice storm on December 10th & 11th. The linemen included Phil Schneider, Pat Pennekamp, Matt Ritchie and Mike Wedig. Part of their duties in Jo Carroll was to repair lines damaged by the ice build up on the lines and poles.



Continued. . .

Dairyland Power Cooperative's Large Scale Renewable Energy

Dairyland Power Cooperative believes 25 X 25 is a foreseeable goal. There are, however, technical and economic issues to address in order to make real progress toward this goal. It will require hard work and cooperation by consumers/members as well as all sectors of the energy industry. For the electric industry, specific challenges to achieving this goal include:

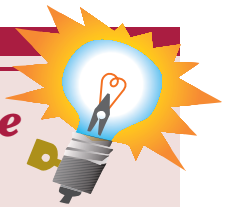
- A limited number of suitable locations for certain types of renewables, and a concern about the impact on the scenic landscape and wildlife if large-scale development of renewable facilities occurs.
- A lack of proven, reliable, easy to install and operate technologies for many of the bioenergy applications.
- The ongoing challenge of rate impacts for construction and operation of new energy sources and energy delivery infrastructure.
- Technical system difficulties for controlling widely distributed energy sources, with varying output and availability, in a way that protects system reliability.
- Legislative and administrative restrictions on development and efficient use of hydropower.

Dairyland fully supports research initiatives, such as those underway at the Electric Power Research Institute (EPRI), that focus on the advancement of renewable energy technologies. Dairyland Power Cooperative believes the future holds tremendous opportunity to increase renewable energy production.

As a wholesale electricity supplier, Dairyland is committed to providing a balanced energy supply that is reliable, affordable and environmentally responsible. This commitment is consistent with the wise use of resources. Dairyland will continue to increase efforts to secure more energy from renewable resources and add more renewable resources to its generation portfolio. The addition of renewable resources will be accomplished as economically as possible.

Watch the February issue of Watt's Happening to learn more about member small-scale opportunities.

Did you know? - Mercury Lights and High Pressure Sodium - Energy Efficiency



According to the National Food and Energy Council, after January 2008, ballasts for mercury vapor lighting will no longer be made. The ballast is the device that starts the lamp and keeps it burning. This ruling by the Department of Energy begins the phasing-out of mercury vapor lighting, in favor of more efficient lighting choices. Even though ballasts for these lamps will no longer be made after January, the lamps (bulbs) will continue to be manufactured to serve existing installations. Over time, more efficient lighting options will be used for outdoor security lighting, street lighting, and related applications.

With that being said Scenic Rivers Energy Cooperative submitted a question to the National Lighting Bureau asking "With the phase out of mercury, what is the most efficient light source for outdoor lighting?" The Bureau responded:

High-pressure sodium (HPS) lighting still is the most efficient light source commonly used for outdoor security lighting. Low-pressure sodium (LPS) is used, too, but far less often. LPS is a strip source rather than a point (or spot) source, like HPS, so it's more challenging to control its distribution of light. Also, LPS causes colors to appear as shades of gray or yellow. While typical HPS lighting also causes some color distortion* e.g., it turns reds somewhat brownish* it renders most colors still recognizable.

As with so many other issues, general answers can be off the mark. The specific application always plays a role. However, if HPS seems to do the trick, and does not result in light trespass or sky glow, it's probably the best general answer.

Environmental Update-

Everywhere you turn now days you can hear something on “Renewable Power, Green Energy, or Carbon Capture.” With the widespread support of global warming it leaves us asking “What does all this mean to an electric cooperative and most importantly member rates?” In a four part series throughout 2008, Scenic Rivers Energy Cooperative will take a look at climate change and the seven areas that the Electric Power Research Institute has identified as deployment programs to reduce CO2 emissions. This special series will also show our members how the state of Wisconsin and Dairyland Power Cooperative is addressing each program.

To start, let's talk about climate and climate change. Climate refers to the average weather- temperature and precipitation, among other variables- over a long period of time. The Earth's climate is always changing. Natural climatic changes occur over seasons, decades and centuries. The periodic rapid warming trend in the eastern Pacific Ocean, known as El Nino, is an example of climate change on a shorter time scale. Natural factors and processes contribute to climate change and include changes in the Earth's orbit and changes in the output of the sun. Scientists agree that green house gases warm the Earth and are accumulating in the Earth's atmosphere as a result of human activities. Those human activities include fossil fuel consumption and deforestation. However, there is considerable uncertainty in scientists' understanding about the impacts of green house gases on the Earth's climate. Whatever the outcome, one thing is for sure; a course of action is needed that includes energy conservation and carbon dioxide emission reductions.

The process of generating electricity is the single largest source of carbon dioxide emissions in the United States, representing 40% of total carbon dioxide emissions from all sources in 2005. Electric Cooperatives generate only about 5% of the nation's electricity, and more than 80% of the electric cooperatives' generation is from fossil fuels. It is estimated that in the future there will continue to be an increase in the demand of electricity therefore an increase in the need for generation. As a result, electric cooperatives have a well-developed interest in technologies that reduce, avoid and store greenhouse gases. Significant reductions of carbon dioxide and other greenhouse gases will and already are placing a great deal of pricing pressure on all forms of carbon-based electricity including coal. With federal and state regulations becoming more stringent to build coal fired combustion plants, transmission and generation companies are exploring alternative generation. Like anything new, this technology comes with a substantial price tag.

Dairyland Power Cooperative, Scenic Rivers Energy Cooperative's generation and transmission supplier, is investing in the future with coal combustion clean up technologies. First, Fabric Filters (also known as Bag-houses) have been installed at both the Genoa Station #3 and the JPM plant. A fabric filter is an air pollution control device that is used to filter particulates from the exhaust gas stream following the coal combustion process. The fabric filters at both plants are in addition to the existing electrostatic precipitator particulate matter control equipment. Results have shown a major reduction in particulate matter emissions at both power plants.

Future planned environmental control projects at Dairyland Power Cooperative include:

- The installation of a dry flue gas desulfurization system, or “scrubber”, to remove sulfur dioxide. Preliminary estimates indicate upwards of 90 percent of sulfur dioxide could be captured by the scrubber.
- Enhanced mercury removal, and new burners to modify the combustion process to reduce nitrogen oxide emissions.

These technologies are scheduled to become operational over the next few years. When operational, the new air emission control equipment will achieve significant reductions of sulfur dioxide, nitrogen oxide, mercury and particulate matter. All this technology comes with an estimated price tag of \$250 million.

It is not just the electric world that will see change. Other energy forms such as propane and natural gas will also have rising price pressures.

To meet the environmental needs of our future, all sectors of the economy need to share the burden of reducing CO2 including industry and transportation, not just the utility segment. With that being said, it is even more important to conserve energy today because in the future it may be too expensive to waste.

Currently Cooking

If your New Year's Resolution is to lose weight, your refrigerator is probably filled with fruits and vegetables. We all know how boring plain fruits and vegetables can be, so this month I found a recipe that could spice up your New Year's Resolution.



Sweet Fruit Dip out of The Four Ingredient Cookbook

- 1 (7 ounce) jar marshmallow cream
- 1 (8 ounce) package cream cheese
- 1 (8 ounce) carton sour cream
- 1 (14 ounce) can sweetened condensed milk

Combine all ingredients using an electric blender. Blend until smooth. Chill at least 1 hour. Serve with assorted fruits.

Power Your Mind – Learn who is bringing you power

Gerald C. Koeller-

District 6 and Scenic Rivers Energy Cooperative's Board representative at Dairyland Power Cooperative

Representing-

Harrison, Jamestown, Paris, Potosi, Waterloo

Family-

- Wife- Kathleen (Nihles)
58 years (being married)
- 8 Daughters
- 3 Sons
- 18 Grandchildren
- 5 Great- Grandchildren

Occupation-

Semi-retired farmer. When we farmed we had dairy, beef, hogs and kids. Kathleen and I live in the house where I was born. Our son Jon, who purchased the farm, lives with us.

Hobbies-

I spend many hours in the shop. During the summer I spend lots of time mowing lawn and spraying fence rows with the "mule".

Why did you choose to become a Scenic Rivers Energy Cooperative Director?

I became interested in the cooperative operation when Grant Electric Cooperative held township meetings every fall. I was elected to serve as committeeman for Potosi Township after a number of years. Mr. Loyd Case decided to retire as director and I was asked to place my name on the ballot since I had some experience on other boards. I thought I might contribute to my community.

What do you enjoy most about serving as a director?

I enjoy working with the board, employees and management. Realizing it is a team effort to make Scenic Rivers Energy Cooperative the best. Our goal is to serve our members with affordable, reliable electric service.

I am grateful to my fellow board members for electing me to represent Scenic Rivers Energy Coop-



erative on the Dairyland Power Cooperative board. This continues to be a learning experience and a challenge to represent our members.



Watt's Happening is published monthly as an information service to the member-owners of Scenic Rivers Energy Cooperative.

Any questions or comments can be directed to Watt's Happening, c/o Megan Graney, Editor, Scenic Rivers Energy Cooperative, 231 North Sheridan, Lancaster, WI 53813 or telephone (608) 723-2121 or toll free Lancaster 800-236-2141, Darlington 800-236-6656, and Gays Mills 888-735-4314.

www.sre.coop

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Megan Graney. Editor

Our board of directors consists of Tom Bennett, Don Walters, Sandy Davidson, Norman Gordon, Gerald Koeller, David Stute, Merlin Kvigne, Larry Butson, and Ellen Conley.



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