

Doing the Right Thing about Climate Change

Guest Editorial by Glenn English, CEO of National Rural Electric Cooperative Association



If you have detected a shift in the national debate on climate change, you would be correct. The focus in the U.S. Congress is not on whether climate change is a problem, but what to do about it and when.

As the Congress moves aggressively on legislation to curb greenhouse gases — primarily carbon dioxide, or CO₂ — legislators cannot ignore the reality of energy supply and demand.

The need for a reality-based approach is particularly important for us in the electric cooperative industry, because, according to the experts, the surplus generating capacity that was built up over the years has now run out. In the next 10 to 15 years, we need to increase the generating capacity we own and operate by 50 percent just to meet projected growth in co-op service areas. And coal is the most plentiful and affordable source of fuel today. New policies regarding coal-based generation at the state and federal levels will have a dramatic effect on our power production and electric rates.

Some folks tout renewable energy as the answer to reducing CO₂ emissions as well as postponing or barring power plant construction. Others urge reducing demand through energy-efficiency programs. Electric co-ops have long embraced both renewable resources and energy-efficiency programs. These options are only part of the solution, however. Unfortunately, there is no single, inexpensive, quick-fix solution, but we must commit ourselves to getting the job done.

The Electric Power Research Institute, an organization of scientists and electrical engineers, has offered a seven-part strategy to achieve significant CO₂ reductions by 2030, employing energy efficiency, renewable energy, nuclear power, new coal technology, carbon capture technology, plug-in hybrid vehicles, and distributed generation.

According to EPRI, new technologies such as carbon capture and storage are not yet available and will require an investment of billions of dollars by Congress to become reality anytime soon. A recent Massachusetts Institute of Technology study concludes that widespread application of such technology is more than a decade away.

Those investment and timeline projections seem at odds with the current congressional mindset. There is a reality gap in Washington and across the country on how and when to achieve these goals. We must close this reality gap between imaginary quick-fix solutions and realistic possibilities to reduce CO₂ emissions. It will take a lot of straight talk to get the Congress to recognize the effort will be neither easy nor cheap.

As member-owners of your electric cooperative, you can be assured that we are doing everything possible to look out for your interests. Your local co-op and the network of nearly 1,000 co-ops nationwide have two primary concerns as this debate unfolds. First, our concern is to keep the lights on. Second, we will do everything we can to minimize rate increases that will arise as new power plants are built and new environmental regulations add to the cost of power. ▶

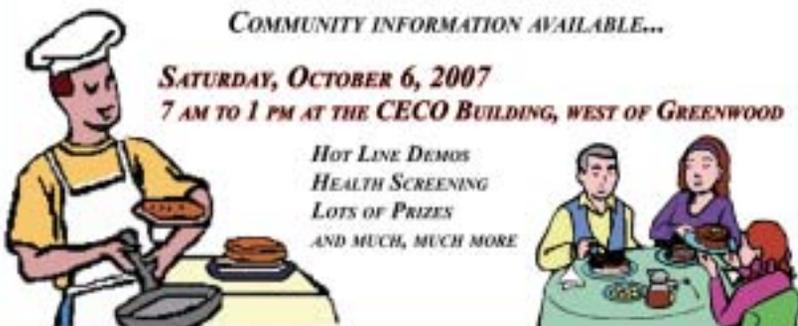


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Climate Change *(Continued from previous page)*

We are telling the Congress that any plan to reduce manmade CO₂ emissions should cover emissions from all sectors of the economy, not simply electricity generation. Any climate change proposal should maintain fuel diversity, allowing a variety of fuel sources, including coal and nuclear generation, to meet the energy and economic needs of the country.

America's electric co-ops have pledged to work with the Congress on climate change legislation. The nation needs sound, responsible legislation. Such legislation should provide incentives to increase efficiency and the use of renewable energy sources. Responsible legislation will fully fund research to hasten the development of needed technology. And good legislation will balance the electric bills of consumers, the health of the economy, and the needs of the environment. ■

SAFETY FIRST

Is Your Farm Wiring Safe?

Safety is always a concern for our workers. Is it a concern of yours, especially in regard to wiring on your farm? Clark Electric Cooperative, along with the Wisconsin Electric Cooperative Association (WECA), has developed the Safety First Program especially for farms. You can have your farm wiring inspected and receive a report on the condition of the service. A Certified State Electrical Inspector does this inspection; there is no cost for our members to have this service performed. If an inspector discovers problems, you are then eligible to participate in the Safety First Wiring Program. Accepted applicants can receive up to \$4,000 in a grant to improve or fix the wiring problems. If more money is needed, the approved member can also borrow up to \$16,000 to complete the project.

To receive more information about the Safety First Wiring Program, contact Clark Electric Cooperative's Operation Department by calling 267-6188 or 800-272-6188. You can also find information about this program on our web site, www.cecoop.com. ■



COOPERATIVE SIGHTINGS



Clark Electric participated in many functions this summer, helping out wherever needed and taking part in all the communities we serve. Look for us to be part of your event. Call and let us know how we can help!



Work continues on the tie line that our crews have been working on this summer. This tie line will improve power restoration during major outages while helping with system reliability.

ENJOY THE COMFORT OF A GEOHERMAL SYSTEM

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Everyone is noticing the prices climbing at the gas pumps these days. If the price at the pump is climbing, imagine what the fuel price to heat your home this winter will be.

Now is the time to do something about it. Why be dependent on fluctuating costs when all the heat you will need is in your backyard?

With an Econar Geothermal System, you have the advantage of both heating and cooling. The system is environmentally safe, cost efficient to run, and adds no harmful fumes into your home.

Call us at 1-866-279-6544 or 715-267-6544 for an estimate on your home. Enjoy the air conditioning comfort this summer and relax knowing you will no longer be held captive by today's fuel prices.

ECONAR® GeoSource® Geothermal Heat Pumps

How Geothermal Work

Geothermal heat pumps can be used to providing heating or cooling services. In each instance the process is similar.

Geothermal Heating

In the heating mode, the water circulating in the earth loop is colder than the surrounding ground. This causes the water to absorb energy, in

the form of heat, from the earth. **The water carries this energy to the heat exchanger in the pump.** In the heat exchanger, refrigerant absorbs the heat energy from the water. The water now leaves the heat exchanger at a colder temperature and circulates through the earth loop to pick up more energy.

The refrigerant gas, which contains energy gained from the earth loop, travels from the heat exchanger to the compressor. In the compressor, the refrigerant temperature rises to 160 degrees. From the compressor, the superheated refrigerant travels to the air heat exchanger. Here, the heat pump's blower circulates air across the air coil, increasing the temperature of the air, which is blown through ductwork to heat the home. After refrigerant releases its heat energy to the air, it then flows to the earth loop heat exchanger to start the cycle again.

Geothermal Cooling

In the cooling mode, the water circulating in the earth loop is warmer than the surrounding ground. This causes the water to release energy, in the form of heat, into the earth. **The water, now cooler from traveling through the ground, flows to the heat exchanger in the heat pump.** In the heat exchanger, hot refrigerant gas from the compressor releases its heat into the water. This causes the water to increase in



An Econar Geothermal Unit — Energy efficient, quiet, and dependable.

temperature, which it releases to the ground.

The refrigerant, which has released its heat energy and become a cold liquid, now travels to the heat exchanger. Here the heat pump's blower circulates warm, humid air across the cold air coil. The air is

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Geothermal...It's For You

(Continued from previous page)

then blown through ductwork to cool the home. The refrigerant in the air coil picks up the heat energy from the air and travels to the compressor. When the refrigerant leaves the compressor, it then flows to the earth loop heat exchanger to start the cycle again. ■

**reprinted from Econar web site*

SAFETY NOTE

Our stickers and signs are on our poles for everyone's safety. Please do not post anything on our poles for our safety.

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