

NRECA CEO warns of 'perfect storm' ahead

We are about to see a fundamental change to energy in America, Glenn English, CEO of the National Rural Electric Cooperative Association reported. There is an unbreakable link between energy affordability, availability and environmental responsibility.

"On one hand, we're out of generation capacity. On the other hand, we're looking at an increasing demand for electricity, and then, trying to address that over the next 20 to 25 years, you pile on top of that the question of climate change," English said.

"When you bring all these factors together, we've got a Perfect Storm. It's going to get increasingly difficult to deal with our responsibility of keeping the lights on — almost impossible and trying to hold down those electric bills," he told more than 1,300 Co-op leaders.

While noting that Co-ops "did not ask for this kind of challenge," English warned there is no choice but to play the hand that has been dealt, adding that most consumer/members — and even many politicians — don't realize how high the price for electricity can rise.

Noting that electric Co-ops have more low-income customers than any other part of the electric utility industry, English warned of the potential impact to our Coop members. "There's no question — these kinds of enormous costs are going to be devastating to an awful lot of low-income folks," he said. "It's going to be hard to make sure that electric power is affordable to all the people in the nation."

English also said that in the run-up to the 2008 elections, the

time is at hand to talk to candidates about the real costs of climate change legislation. New technologies will take a lot of time, money and hard work to develop.

CO-OPS ARE DIFFERENT

- Local, consumer-owned and not for profit
- Rural and Main Street people not Wall Street
- Of, by and for the people all costs paid by the members
- Homeowners, farmers, ranchers, small-business owners most at risk for bill increases
- We are looking out for our members. We have an obligation to meet their growing demand for reliable, affordable power.

Government can be a part of the solution, or part of the problem.

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Office Hours 7:30 a.m. to 4 p.m., Mon. - Fri. Energy Efficiency Tip of the Month

By resetting your programmable thermostat from 72 degrees to 65 degrees for eight hours (for instance, while no one is home or while everyone is tucked in bed) you can cut your heating bill by up to 10 percent.

Source: U.S. Dept. of Energy

America's rural electric story

Last month, we learned how the rural electric program came into being when President Franklin D. Roosevelt created the Rural Electrification Administration with an executive order in May of 1935. By 1936, the movement for Cooperative rural electrification swept across the land. Rural men and women petitioned, educated, organized and created their Cooperative institutions. REA developed assembly-line methods for line construction with uniform procedures resulting in lower costs which made electricity feasible for more and more rural people. Rural electrification was on the march. Now...

The New Hired Hand

Soon after light and power came into the home, farmers and ranchers began to realize the potential for electricity in their daily work. Electricity could grind feed, shell corn, pump water and saw wood. It powered milking machines and lifted hay into the barn. Electricity furnished the bright lights in the barnyard, giving precious extra hours to bring in the harvest. At the heart of all these lightened labors, the increased productivity, was the electric motor the new "hired hand."

A new Cooperative enterprise soon appeared on Main Street. The first offices of rural electric systems most often were humble, storefront affairs, but they were welcome additions to rural communities determined to pull themselves out of the throes of a Depression-ridden rural America.

The unique new enterprise soon found itself in the forefront of community affairs. The directors they had elected were their neighbors and friends farmers and ranchers like themselves. They met monthly to set policy and give guidance to the manager.

The entire Co-op form of running the system was given full and democratic expression once a year. This was the annual membership meeting. Under one-member/one-vote bylaws, consumer control was assured.

It was — it continues to be — economic democracy at work.

There was a quickening of life in the community. Schools, churches and meeting places now had lights — and other electric conveniences — for the first time. All the electric improvements sent out a mighty ripple of new economic activity down Main Street. New business and new kinds of businesses — electric wiring, plumbing, new electric appliances in the stores.

And, new industry. With electric power available from the Co-op, plants could locate in rural areas

bringing jobs. Jobs giving hope and promise, and a future, for the young folks in rural America — a rural opportunity.

The rural electric Co-op had become a vital economic foundation, with its board of directors providing a rich store of new community leadership. Respect. Responsibility. Revitalization. Rural electrification. Not so wild a dream, after all.

They are a remarkably unified movement, these groups of rural electric people, hanging tough and strong. Much of their solidarity comes out of the abiding cooperative spirit so deep-rooted in the governing of their electric systems. From the grass-roots power of those folks out on the line, on through the strong and active "statewide" organizations to Washington, DC and the National Rural Electric Cooperative Association (NRECA), this bulwark of unity has spelled survival, growth and maturity for Cooperative rural electrification, a unity that continues as its greatest source of strength.

When rural electric Cooperatives first were organized, their directors and managers wondered how they and their neighbors were going to use all the electricity the lines were built to carry. Forty kilowatt-hours (KWH) a month seemed impossible.

Their apprehensions were short-lived, as a review of national rural electric growth rates indicate. Ten years after the program "took off" in 1938, the astronomical figure of 40 KWH, thought to be wildly optimistic earlier, had tripled to more than 120 KWH as a national average of on-farm consumption in 1948. And electric consumption in rural areas continued to rise at phenomenal rates for several decades. The accelerating consumption, combined with the millions of farms that were being electrified for the first time, made rural electrification the growth industry in agricultural areas for many years — much to the delight of appliance and equipment manufacturers and dealers.

In 1938, when 40 KWH seemed like a pipe dream, the typical rural electric system had built and was operating 250 miles of line with \$230,000 the Co-op had borrowed from the REA. The fledgling electric utility had about 899 consumer-members who had elected directors to govern the affairs of the organization. The Co-op staff consisted of a manager, a bookkeeper, a line foreman and crew.

By the time of the bombing of Pearl Harbor in December 1941, and the outbreak of World War II, there were nearly 775 rural electric systems operating or under development across rural America. The war effort slowed the advance of rural electrification, but at its close, new legislation was enacted by Con-

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Estimating appliance and home electronic energy use

If you're trying to decide whether to invest in a more energy-efficient appliance or you'd like to determine your electricity loads, you may want to estimate appliance energy consumption.

You can use this formula to estimate an appliance's energy use:

Wattage X Hours used per day X Days used per year \div 1,000 = Kilowatt-hour (KWH) consumption per year

For example:

Personal computer (120 Watts) and monitor (150 Watts):

(120 Watts + 150 Watts) X 4 hours per day x 365 days per year \div 1,000 = 394 KWH/year

Then, calculate the annual cost to run an appliance by multiplying the KWH per year by your Coop's rate per KWH consumed.

394 KWH X \$0.104 (current national average) = \$40.98 per year

You usually can find the wattage of most appliances stamped on the bottom or back of the appliance, or on its nameplate. The wattage listed is the maximum power drawn by the appliance. Since many appliances have a range of settings (hairdryers), the actual amount of power consumed depends on the setting used at any one time.

Here are some examples of the range of nameplate wattages for various household appliances:

A little weatherstripping can save a lot of money

January's cold temperatures can put your home's heating system to the test. You can help it work a little less by adding a few dollars' worth of weatherstripping.

The first thing you want to do is determine where air is leaking in around windows and doors. Measure around the area that needs to be sealed and then add 5 to 10 percent to account for any waste.

Also, weatherstripping comes in different widths and lengths and that should be taken into consideration.

If you're not sure what would work best for you,

contact your Co-op's Energy Advisor. They'll be able to offer a number of good ideas to help you conserve and save on your energy bill while maintaining a comfortable temperature in your home.



Clothes washer = 350–500 Watts Clothes dryer = 1,800–5,000 Watts Dishwasher = 1,200–2,400 Watts (heat drying feature increases energy use)

Hair dryer = 1,200–1,875 Watts Microwave oven = 750–1,100 Watts Personal computer

- CPU awake / asleep = 120 / 30 or less
- Monitor awake / asleep = 150 / 30 or less
- Laptop = 50 Watts

Refrigerator (frost-free, 16 cubic feet) = 725 Watts **Televisions**

- 27" = 113 Watts
- 36" = 133 Watts
- 53"-61" Projection = 170 Watts
- Flat screen = 120 Watts Water heater (40 gallon) = 4,500–5,500 Watts

Source: U.S. Department of Energy — Energy Efficiency and Renewable Energy

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Seasonal affective disorder: How changing seasons could affect your mood

Every 365 days, the Earth completes a revolution around the sun, fading summer into fall and winter to spring. For some people, the changing seasons bring drastic changes in mood.

According to the American Academy of Family Physicians, 10 to 20 percent of adults in the U.S. may experience mild Seasonal Affective Disorder (SAD), a cyclic and seasonal condition with symptoms like

depression, low energy, sleepiness, overeating, changes in appetite, weight loss or gain, insomnia and anxiety. For those who experience SAD, symptoms recur every year at about the same time and are unrelated to other major life events.

Most people with SAD experience depression in the winter and enjoy a more positive outlook in spring and summer.

Weak winter sun can lead to depressive episodes

The National Mental Health Association reports that an excess amount of melatonin, a sleep hormone released in the brain, might be to blame for symptoms of winter depression. The brain releases melatonin when it is dark; short winter days with less sunlight cause the brain to produce more melatonin than it should. Too much melatonin can cause sleepiness and depression.

America's rural electric story

gress to complete the job. This legislation liberalized interest rates and payback periods for REA loans, making rural electrification possible for even the most remote regions.

By 1947 there still were 2.5 million farm families without light and power, but the period of rural electrification's greatest growth was about to begin. Feverish and fantastic growth followed for electric Co-ops all across the nation. By 1948, more than 40,000 consumers a month were being connected to Co-op lines. In 1949 alone, 184,000 miles of electric line — more than 700 miles a working day were energized.

By 1953, close to five million farms, or 88 percent, had been electrified and there were 1.2 million miles of electric lines singing along America's rural roads and highways.

By May of 1960, the 25th anniversary of REA,

Lack of sunlight also can confuse your body's circadian rhythm, or 24-hour cycle, making it difficult to maintain normal sleeping and waking hours.

How do you know if you have SAD?

According to the American Academy of Family Physicians, you may have depression related to a seasonal affective disorder if:

> You experience symptoms of depression or mood change at about the same time each year for at least two years in a row;

Periods of depression are followed by periods of non-depression;

Nothing else can explain the change in your mood or behavior.

Beat the seasonal blues

All experts agree that if you experience serious symptoms of depression or have thoughts of suicide, you should see a doctor

to get help. For milder cases of seasonal depression, you can learn how to cope and find joy in every season. Experts at the Mayo Clinic recommend that you try the following:

Exercise regularly;

Increase your exposure to sunlight in winter;

Make it a habit to do something you enjoy;

Consult your doctor if feelings of hopelessness or depression persist.

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the big push for the construction and development of the local Co-op systems had resulted in 97 percent of all U.S. farms being electrified.

Grateful farm and ranch families wrote letters of thanks to REA, to President and Mrs. Roosevelt, and later President Truman, telling how their lives and work changed so much for the better. Letters to REA related that the night the lights came on the children and parents alike ran through their homes, turning lights on and off. Some even told of hurling their hated kerosene lamps, sooty glass chimneys and all, out of the window.

In Tennessee, a farmer who got his lights in the early 1940s, rose the next Sunday at church to bear witness: "Brothers and sisters, I want to tell you this. The greatest thing on earth is to have the love of God in your heart, and the next greatest thing is to have electricity in your house."

