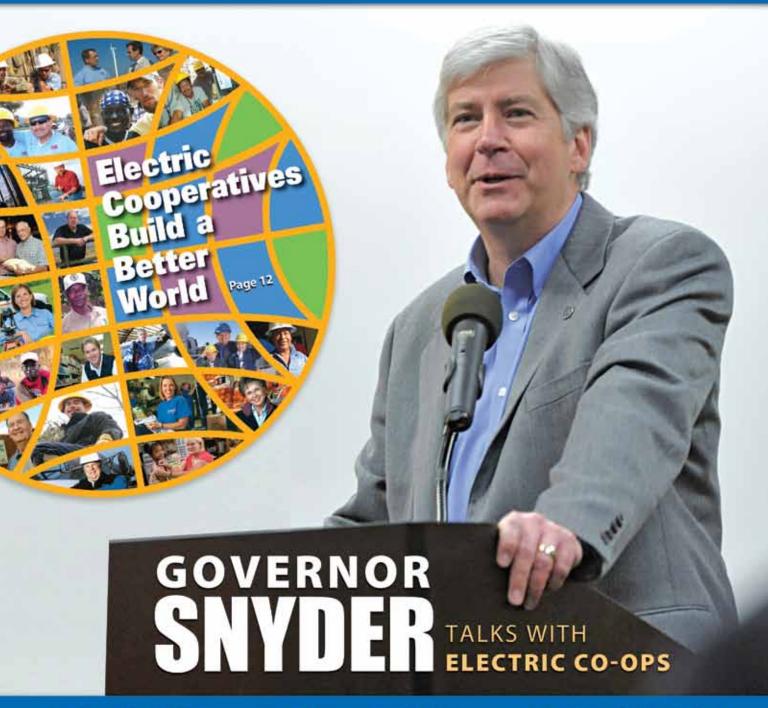
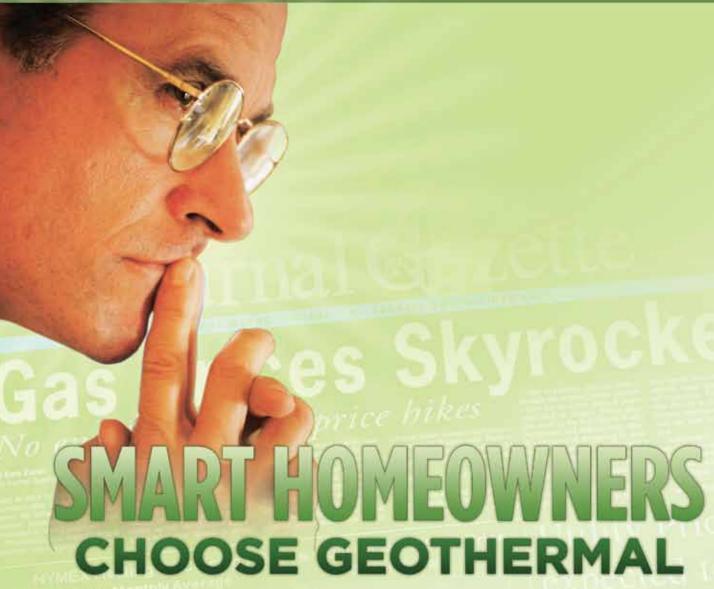
Michigan COUNTRY LINES





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Big Rapids Stratz Heating & Cooling (231) 796-3717

Caro AllTemp Comfort, Inc. (866) 844-HEAT (4328)

Carsonville
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(810) 300-7748

Charlotte Applegate Home Comfort (517) 541-8013 **Cheboygan** Jim's Handyma

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Clifford Orton Refrigeration & Htg (989) 761-7691

DeWitt S & J Htg & Clg (517) 669-3705

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Grand RapidsMontgomery Htg & Clg (616) 459-0261

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Michigan







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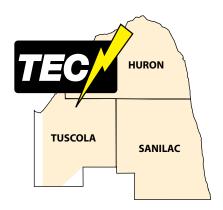
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The contributions electric co-ops make to building a better world will be highlighted during 2012 as the International Year of Cooperatives. Plus: Gov. Rick Snyder talks about his rural economic plans and electric co-ops.

Snyder Photo – Mike Quillanin





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Visit Thumb Electric's website:

tecmi.coop

When the Lights Go Out

Dallas Braun

General Manager

ne of the main goals at Thumb Electric is providing you with a reliable source of power, or in simpler terms, "keeping the lights on." Every day, the 29 employees of Thumb Electric each do their part to help ensure that its 12,300 members have electricity available when they need it, which is 24/7, 365 days a year. Electricity is, without a doubt, a big part of our daily lives.

So what happens when your lights do go out? After you see that the alarm clock doesn't blink back on, and you flip two or three light switches just to be sure, maybe you fumble for the flashlight and then call Thumb Electric.

During a typical outage, our office staff or after-hours answering service

would take your call and send a line crew to get the power back on in a matter of an hour or two. But sometimes "Mother Nature" hits us hard and the resulting outages are anything but typical.

This was the case on Nov. 29. Our system was hit by an early-winter storm with ice and heavy, wet snow late in the evening. The snow accumulated until the weight was too much and caused wires and poles to break and fall.

The storm's impact was large enough to put a hold on everything normal for several days. Thousands of members were without power and understandably wondering, "What's the deal, when will I have my power back on?"

During a big system outage like this, the answer to those questions can be a challenge since we're dealing with so many unknowns. Let's take a look behind the scenes at what it takes to get your lights back on during a major outage.

Behind the Scenes

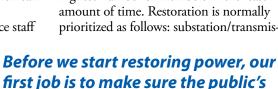
Your phone calls started pouring into our local after-hours answering service within minutes and the on-call lineworkers were dispatched.

> It was quickly realized that this was not a typical outage, which triggered a change where employees were called in from the comforts of home to open the main office to handle the phone calls and dispatch crews.

> The name and address of every member that called in is entered into the outage computer system. This helps the dispatcher deter-

mine which substations, circuits and members are affected, and the information is used to prioritize power restoration efforts.

The goal is to restore power to the highest number of members in the least amount of time. Restoration is normally prioritized as follows: substation/transmis-



sion, main circuit, three-phase line, singlephase line, and then individual meter outages.

Safety First

safety is not in jeopardy.

Before we can start restoring power, we make sure the public's safety is not in jeopardy.

When lines and poles fall across roadways or heavy wet snow causes the lines to sag low, these hazards have great potential to injure someone. The first job is to clear up these hazards.

Line crews are dispatched to these areas based on information received from phone calls from members, neighbors and 911.

Other TEC personnel are dispatched to similar locations to standby and keep the public away until the line crews arrive. When the line crews arrive, they cut-andclear the area, make the location safe, and move on to the next hazardous location.

This part of service restoration is usually

very time-consuming and frustrating, because we know the clock is ticking and it will be awhile before anyone gets their power back on. It is not uncommon to spend the first 12 to 18 hours of a major storm cutting and clearing hazards in order to keep the public safe.

Calling In Extra Help

About the time when members start expecting their power to return, we are just getting started to actually make repairs.

Realizing early-on that this storm had caused severe damage to our system, we called for additional line crews to help. Thirty lineworkers started arriving from Sebewaing, Bay City, Great Lakes, Cherryland, and Presque Isle. As they rolled into the Thumb area, a TEC employee was put in charge of each out-of-town line crew to 'bird dog' or take them around to the trouble spots.

With line crews ready to work, the dispatcher has to figure out the best work plan to get power restored. This is done by sending out a person to "patrol" a problem area and then report back the outage details to the dispatcher. This "patrolling" of all the trouble spots keeps the required work moving along quicker and more efficiently. Line crews can get to the job and go right to work to fix the problem.

Thanks for Your Patience!

This sounds pretty simple on paper, doesn't it? This re-telling is definitely glossing-over the reality of the conditions for the crews and the long hours they put in, the logistics of getting specialty equipment to the job sites, and much more. All told, about one-quarter of Thumb Electric members were impacted by outages caused by this storm. Employees did their jobs efficiently and then-some to restore service as soon as possible.

Thanks to you, the co-op member, for being patient during the major inconvenience of this extended power outage. Perhaps with a glimpse and better understanding at what happens behind the scenes, these situations will be a little more bearable. With the lights back on, we can all appreciate the conveniences that electricity gives us, and be glad that candles and lanterns are now used mostly as decorations.

Special Election Notice for TEC Members

In March 2012, a nominating committee of nine Thumb Electric Cooperative members will meet to select a slate of candidates for one director position in each of the three counties served by the cooperative.

Positions currently held by Donald Wolschleger, Leonard Briolat and Karl DeSimpelare will be voted on at the 2012 annual meeting.

Any co-op member interested in running for a district director position should write a letter to the Thumb Electric nominating committee chairperson prior to Feb. 10, 2012, indicating his or her interest in being nominated.

The committee will review the prospective nominee's qualifications to determine whether they meet bylaw requirements and whether he or she should be put on the ballot.

If you would like more information, please contact the co-op's general manager, Dallas Braun, at 800-327-0166 or 989-658-8571.



Annual Meeting Notice

Saturday, June 9, 2012 **Cass City Recreational Park** Business meeting begins at 10 a.m.

Tree-Trimming Schedule

Your electric co-op right-of-way clearing program will proceed as weather permits. Areas scheduled soon for clearing by Kappen Tree Service include:

TUSCOLA COUNTY:

Almer Twp. – Cleaver, Dutcher, Akron and French roads; Columbia Twp. – French Road.

HURON COUNTY:

Lincoln Twp. - Carpenter, Church, Cross, Crockard, Dobson, Filion, Hellems, Minnick, Verona, and Tomlinson roads: Bloomfield Twp. – Redman, Isler, and Dobson roads; Dwight Twp. – Verona and Moeller roads; Port Austin Twp. - Grindstone, Sullivan, Hunter and Verona roads; Huron Twp. - Kinch, Stoddard, Day, Moeller, New River, Huron City, Kinde and Schott roads; Sherman Twp. – White Rock Road; all of the following townships - Meade, Hume, Lake Caseville, Chandler, Colfax and E. Sherman.

SANILAC COUNTY:

Delaware Twp. - all of east Delaware Twp.; Upper Forester Twp. - Lakeshore, Russell, Richmondville and Mills roads.

Please call Thumb Electric at 989-658-8571 or 800-327-0166 if you have any questions or concerns.



Iverson's Snowshoes

We really enjoyed your last *Country Lines* (Nov-Dec 2011), especially the article on Iverson's Snowshoes. We purchased a pair of these when we bought our summer cabin in 1980, and we do use them for "décor" only. This past summer we discovered they [Iverson's] were in business at the lumber yard (although closed at 5:30 p.m.). We thought they were gone—such good news and we wish them success with new owners!

Also, James Dulley's article on "How Low Can You Go?" was very interesting. We live in rural northern Illinois with one of the highest electric rates in the U.S. and we have a good size all-electric home; well insulated. In 2009, we put in a heat pump with backup heat; we also have new AC and have always had duct work (electric forced air). We've lived here

25 years and have conserved our usage, our temp is 63° in winter and 80° in summer and with the new heat pump, our bills are lower.

However, the house is very, very dusty now and I wonder if this is due to the heat pump as it draws air from outside? Is this normal for a heat pump? I always enjoyed the clean aspects of electric heat and this is a change.

Mike Buda's trip out west was delightful and I'd planned to write before the trip and say, "Don't miss the Hearst Castle in San Simeon." I got too busy—maybe he can put this on his list for the next trip.

We are from Michigan and have lived in Colorado, Utah and California. We loved the west (also a stint in Texas) but there is nothing as good as Michigan and that is why we make the 360-mile trip several times up to the U.P. and our little cabin in the summer. Your *Country Lines* gives me that needed boost to get through the winter until we go north again. Keep up the good work!

– Peggy Visser, Marengo, IL

More on "Nukes"

Bonnie Kenzie wrote in "Letters" her dismay regarding nuclear power plants. I believe that a well-rounded approach to providing energy is probably the wisest. Solar, wind, hydroelectric, coal and nuclear all have a place.

My son is serving in the Navy aboard a nuclear submarine. His attack sub displaces over 9,000 tons, and the "boomers" displace 18,000 tons. One nuclear reactor drives the sub at about 40 miles per hour, for 30 years, while supplying all the oxygen, heating, cooling, water, and other kinds of power for the sub and its 120- to 160-man crew. The reactor does not need to be refueled for that entire 30 years. All of this is accomplished with a piece of uranium the size of a golf-ball!!

This kind of power generation has been used safely since the USS Nautilus first sailed under nuclear power in 1958. There certainly may be some concerns in the civilian power generation setting, and these need to be addressed, but this type of "on demand" power dwarfs others in its safety record, cleanliness and maximum output for so little input.

I think we need to see more nuclear power research, to make it even safer, but I also think that this is where America's energy will come from in the future. It seems to me that it has to. Where else will the power come from?

- Colin Saxton

In October's letters, the "No Nukes" writer pointed out traditional concerns over nuclear power. I felt the editor responded appropriately and pointed out the apparent limits of renewable energy sources.

In Traverse City, we have a group of people who are forcing the demolition of four existing dams which had produced electric for the community. Some of the people would tear down every dam in the world if they had their way.

In the "No Nukes" letter, the writer reminded us of the infamous Three-mile Island event in which not a single person died. We kill an average of 40,000 people per year on the roads. We average 600 airline deaths per year. It appears the U.S. nuclear power community takes their responsibility very seriously.

Statistics indicate that China consumes more coal than the U.S., Europe and Japan combined. They also continue to construct nuclear power plants and are now starting construction of one new "clean coal" power plant per month. Also, the Chinese reportedly are investigating the construction of the revolutionary thoriumfueled "Molten-Salt Reactor"

MYSTERY PHOTO

Every co-op member who identifies the correct location of the photo below by **Feb. 10** will be entered in a drawing for a \$50 credit for electricity from your electric cooperative.

Please note that we do not accept Mystery Photo guesses by phone! Email mysteryphoto@countrylines.com, or send by mail to Country Lines, 2859 W. Jolly Road, Okemos, 48864. Include your name, address, phone number and name of your co-op. Only those sending complete information will be entered in the drawing. The winner will be announced in the March 2012 issue.

The November/December contest winner is Helen Engel of Stephenson, who correctly identified Floyd's Auto on M-35 north of Menominee.





Scholarships Offered

ach year, the Michigan Electric Cooperative Association awards two \$1,000 scholarships to qualifying applicants. Individuals are chosen based on their scholastic achievement and extracurricular involvement during their high school career.

The applicant's parent or guardian must be a member or employee of a Michigan electric co-op, and the applicant must be planning to attend a Michigan college or school full-time.

Selection will be based on grade point average, character, leadership, academic achievement, extracurricular and community activities, and essay response.

Applications are available at countrylines.com; click on "Youth," email tschafer@meca. coop, or call 517-351-6322, ext. 205. Eligible applications must be postmarked by *April 6, 2012*.

(MSR). One pound of thorium produces as much power as 300 pounds of uranium. In traditional reactors, you only burn 1.5 to 3 percent of the uranium fuel, but in thoriumfueled MSR reactors, you consume 99 percent of the fuel. They consider these MSR reactors "walk-away safe." Perhaps the editor could update us on the clean-coal and MSR electric generation systems status in this country.

I wish solar and wind could provide most of our electric. but solar consumes an enormous area (it's measured in square miles not square feet). On average, the sun only shines effectively about 25 to 30 percent of the time in the U.S. Optimum locations for wind farms typically occur far from the user, requiring prohibitively expensive distribution networks.

The writer suggests we follow the common sense of Italy give me a break! Italy probably can't afford matches to light a fire, and I suspect Germany will quickly abandon their illthought-out plan to shut down all their nuclear plants in the next 11 years. The E.U., and mostly Germany, has a little problem called Greece, not to mention Spain, Italy and Ireland. To compare their plight to an old "Hill-Billy" song-Their can-do can't keep up with their want-to.

- James E. Benner, Cedar

your name and town.

More Road Trippin'

I noted with interest the part of your article (Sept., "Road Trippin'"/Mike Buda) that mentioned the decoration and display of big rigs that you saw on your trip. Did you know that each year in Mackinaw City during a weekend in September that there is something similar? The rigs are decorated and all lit up, and after a trek across the bridge they move though Mackinaw City with all the lighting turned on, horns blaring. You can hear it miles away! I make sure that I drive into town to see it. One must go early, because if you don't you won't get a parking space. People drive from just about anywhere to see it. It's quite a spectacle. All one needs to do is contact the Mackinaw City Chamber of Commerce to find out the date for the next one. It should not

be missed! Thanks for the articles, please keep them coming.

> - Marilyn Oslund, Mackinaw City

Mike Buda: Thanks for the information, Marilyn. I made up the part about the competition by truckers in the middle of nowhere, because it seemed like something they would do. It's interesting to know that it really happens, maybe even in more places than Mackinaw City.



How would you like a chance to tour Washington D.C. with other students from around the nation?

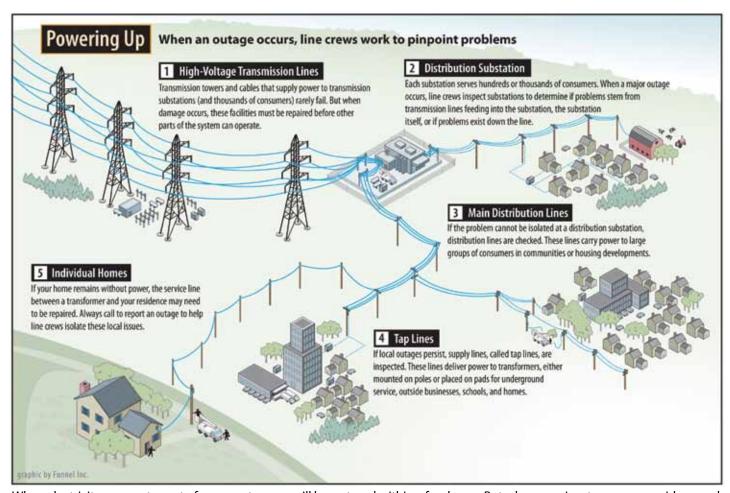
It all starts at the Youth Leadership Summit, April 18-20 at the Kettunen Center in Tustin. This FREE high-energy experience will help you develop your leadership habits, explore career opportunities in the electric industry, and learn how to be actively involved in the democratic process. Students chosen to attend the Youth Leadership Summit will automatically be considered to win a FREE trip to the Rural Electric Youth Tour to Washington, D.C., June 16-21.

To learn more, visit miYLS.com or call 517-351-6322 ext. 206.



Share Your Tips With Readers!

Please tell us, in 50 words or less, the ways you make life better, easier, healthier and more fun. These may include tips about health, finance, relationships, organizing time, energy and water conservation, maintaining your house and yard, gracious giving, recycling and re-using to create less waste, or giving to your community. We'll try to print as many tips as we can in each issue. Email czuker@meca.coop or mail to Country Lines Lighter Living Tips, 2859 W. Jolly Rd., Okemos, MI 48864. Please include



When electricity goes out, most of us expect power will be restored within a few hours. But when a major storm causes widespread damage, longer outages may result. Co-op line crews work long, hard hours, often in bad weather, to restore service safely to the greatest number of consumers in the shortest time possible. Here's what's going on if you find yourself in the dark.

If You Smell Gas...

id you know that propane gas has no odor? The "rotten egg" smell is added for your safety, to help alert you to any possible leaks. If you smell gas in the house, or if you have a gas alarm that signals the presence of gas, immediately follow these safety guidelines:

► No flames or sparks!

Immediately put out all smoking materials and other open flames. Do not operate lights, appliances, telephones, or cell phones. Flames or sparks from these sources can trigger an explosion or fire.

▶ Leave Immediately!

Get everyone out of the building or area of the suspected leak.

► Shut off the gas.

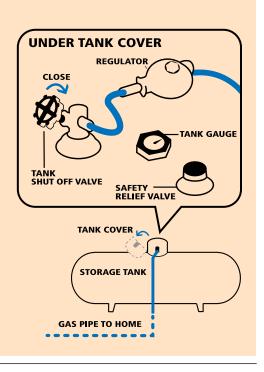
Turn off the main gas supply valve on your propane tank if it's safe to do so. To close the valve, turn it clockwise (see diagram).

► Report the leak.

From a neighbor's home, call Thumb Electric at 800-327-0166 right away. If for some reason you can't reach us, call 911 or your local fire department.

► Stay away.

Do not return to the building or area until we have determined that it is safe to do so.



Thumb Electric Cooperative



Energy Efficiency Loan Program

Thumb Electric Cooperative has expanded its Energy Efficiency Loan Program for existing homes. Qualified members of existing homes may borrow up to \$15,000 at 7 percent interest, payable over seven years for the following home improvements—water heaters and central heating and air conditioning systems that reduce energy consumption, including:

- ✓ Gas furnaces/boilers
- Geothermal systems
- ▲ Air-source heat pumps
- ✓ Wall, ceiling and floor insulation
- ✓ Duct, pipe, water heater insulation
- ✓ Ventilation fans
- ▲ Clock thermostats
- ▲ Thermal windows, storm windows, insulated doors and storm doors
- Controlled electric heat systems



A geothermal unit uses renewable energy from the earth and can heat, cool and also heat the water in your home.



Call **800-327-0166** or **989-658-8571** to schedule a home energy analysis. We will show you how much money you can save. The loan portfolio is limited to \$225,000 per calendar year.

Educating the Next Generation of Community Leaders

Co-ops go the extra mile to show kids the benefits of membership.

ach June, nearly 1,500 high school students, mostly seniors-to-be, descend upon Washington, D.C., for the annual Rural Electric Youth Tour. During the week-long trip, the participants—all sponsored by their local electric co-ops—learn about co-ops, American history, and the role of the federal government.

Youth Tour stands as just one way co-ops help educate a vital segment of their consumer base: the children of electric co-op members. Kids who live in homes that receive co-op service enjoy certain benefits, ranging from Youth Tour to college scholarships to school safety demonstrations.

"Engaging kids is an important part of the cooperative difference," says Doug Snitgen, youth programs director for the Michigan Electric Cooperative Association. "They're members in training."

The Touchstone Connection

Touchstone Energy Cooperatives (see touchstonenergy.com), of which five Michigan co-ops are members, offers lots of educational initiatives for kids, be it safety, energy efficiency, or learning how electricity works. Its Super Energy Saver program, featuring cartoon character CFL Charlie, for example, uses classroom activities and take-home items—such as light-switch covers that remind you to turn off the light when you leave the room—to show how simple steps can add up and make a difference in keeping electric bills affordable.

The Safety Factor

Safety is another important focus for youngsters. Most electric co-ops offer hotline safety demonstrations or classroom shows that highlight common electrical dangers that students may encounter. Co-op safety employees use a miniature electrified farm or townscape to highlight hazards such as climbing trees near power lines, flying kites too close to them, and what to do if a car accident leaves fallen wires nearby.

Many electric co-ops also send lineworkers into local schools to show young folks the different levels of protection they wear when on the job, further underscoring the importance of staying away from power lines.

Concern for Community

Supporting youth programs isn't just the right thing to do—co-ops have a responsibility to do so, according to the Seventh Cooperative Principle, "Concern for Community."

This Michigan electric co-op-sponsored group of high school students spent a week in Washington, D.C., in June as part of the national Rural Electric Youth Tour.

"Electric co-ops are part of the fabric of the cities and towns they serve. It's only natural they have a hand in improving the quality of life in their communities," Snitgen explains.

College scholarships are another prime example. Many electric co-ops in states nationwide, including some in Michigan, award scholarships to graduating high school seniors. Selection is based on an application process that includes grades, extracurricular activities and community involvement. Some co-ops even offer adult education scholarships to help cover the costs of furthering their education.

Another example is the Youth Leadership Summit (see ad on p. 7 and visit miYLS.com). For nearly 30 years, Michigan electric co-ops have sponsored a free, three-day leadership conference, now called the Youth Leadership Summit (formerly known as Electric Co-op Teen Days), for more than 30 high school students from across the state.

This co-op-sponsored experience helps high school sophomores and juniors develop leadership skills, explore electric industry career opportunities, and learn how to be involved in the democratic process, not only with their co-op, but in their communities.

"Our biggest challenge is incorporating the co-op message while keeping students engaged and active," Snitgen adds. "We strive to balance educational aspects with recreation and fun times."

Michigan electric co-ops also help schools and kids by providing classroom grants for innovative educational programing, supplying backpacks filled with school supplies, and even sponsoring a marathon to benefit local groups that help kids, such as Big Brothers/ Big Sisters.

Some co-ops also participate in job fairs, and offer special activities—from jugglers to face painting to bucket truck rides—at their annual membership meetings.

"You can't find anything that fits better with our cooperative principles of giving back to the community, supporting education, and cooperating than co-op/school partnerships," Snitgen concludes. "Schools and co-ops are at the heart of most communities, so we need to be able to reach future members to have an impact."

Support of their young members doesn't stop at the co-op's door. Local youth program offerings vary, so please contact your electric co-op to find out what programs they may offer (find your co-op's contact information on page 4).

Gov. Snyder Asks Co-op Leaders To Help Reinvent Michigan

he goal of our administration is not to fix, but to re-invent Michigan," Gov. Rick Snyder told people attending a recent Michigan Electric Cooperative Association (MECA) board

"I'm working on a broader perspective not where we've been, but where we need to go," he explained. While the state has suffered some tough years, he said there's too much negativity and fighting over a shrinking pie, and that culture must be changed by working together.

Snyder says his administration is taking "relentless positive action" on how to grow Michigan and repair the state's economy in multiple areas.

Agriculture & the Environment

As his first example of Michigan's "positives," Snyder emphasized, "Agriculture is shining. Agriculture is our greatest success story in the last 10 years."

He's calling for continued agricultural research and development (R&D)—especially on value-added products and the processing of fruit—as well as export opportunities such as new trade agreements with Korea, credit guarantees, and phasing-out tariffs.

"Michigan is the second most-diverse agricultural state in the U.S.," he said, and it leads the nation in blueberry production. Snyder smiled as he shared what Michigan means overseas. "I was sitting next to a Chinese businessman at a luncheon, and when I asked what he thought of Michigan, the Chinese man just smiled and said, 'blueberries.'"

Describing directors of the Michigan departments of Agriculture and Rural Development, Environmental Quality, and Natural Resources as the "quality of life group," Snyder talked about his relationship with these teams and said he supports 'regulatory change that is not about what the rules are, but how the rules are applied.' Helping them [farmers] succeed and helping them on a new path and not penalizing them is the goal."

One of Snyder's plans is renewal of the timber and mining industries, and good management of state lands in an environmental way. "We have to leverage these assets

in a constructive, positive way that doesn't impede business and growth."

Regarding constructive use of the state's assets, a discussion ensued about Wolverine Power Cooperative's work with Michigan Technological University on R&D that is examining the use of plants and other sustainable biomass as fuel sources for generating electricity. Snyder stated, "We should look at all those opportunities." He also questioned how the state currently leverages timberlands, noting, "We actually have stuff rotting in the woods...how dumb is that?" He added that R&D on what types of trees to grow and strategies for growing them is needed.

Market and Talent

To help ag and other sectors grow, especially the rural economy, Snyder will move forward with re-doing funding for commerciallyimportant roads and bridges by changing the 60-year-old law that funds them.

About the state's infrastructure, he added, "I want your input as rural citizens on the use of rural roads, bridges, rails and ports needed to get agricultural products to market."

Snyder also wants to highlight opportunities and retraining for Michigan young people, noting that those in rural areas especially don't have the right match of skills for long-term supply and demand.

"In five to 10 years, a number of senior managers in the agricultural industry will be retiring, and we hope to replace them with younger people," he said.

Questions On Energy

When asked what he likes best about his job, Snyder referenced the 80 town hall meetings



Gov. Rick Snyder shares his plans for "relentless positive action" with the MECA board and guests. He said his administration's task is not to create jobs, but to create ways for jobs to grow and flourish.

he hosted during his campaign. "Q&A tells me if we're doing things right or what's missing and needs improvement... we can solve problems together."

In regard to electric power generation, Snyder said he supports exploring both the producer and consumer sides of electricity especially on generation fueled by natural gas. He expressed concern about long-term power supply prices.

"We need a long-term [power] supply that works well for all in our state...let's talk about the alternatives," he said while calling on electric co-op directors to join him and to lead outside of their comfort zones. "We need a statewide dialog with you, and need acting instead of reacting."

Another question he fielded was about the slash in federal funding for state programs that help low-income people pay their energy bills. The governor supports a short-term solution that was recently passed by the Michigan Legislature, but indicated "...it's not good enough to solve this short-term, we need a sustainable answer for the future."

Speaking earlier in the day, John Quackenbush, chairman of the Michigan Public Service Commission (MPSC), agreed that a short-term fix is needed immediately to provide heating assistance this winter to low-income people. He is hopeful that a long-term program will be in place when the short-term fix expires in nine months.

"There's still too much divisiveness in our state," Snyder said at the meeting's end. "I'm at war with no-one—my job is to solve problems, and it's time to move forward... Co-ops need to help lead the charge. We will be a great state again."



The Year of Living Cooperatively

Electric co-ops join a global celebration of member-owned businesses.

s it possible to change the way people eat a piece of fruit? Could cheese unite communities? Can electricity transform a country's future? It's all possible...with a little cooperation.

The United Nations General Assembly has designated 2012 the International Year of Cooperatives (IYC 2012), under the banner "Cooperative Enterprises Build a Better World." The resolution recognizes the vital role co-ops—democratically governed businesses that operate on an at-cost, nonprofit basis—play in global economic and social well-being and encourages countries to foster cooperative development as a way to generate local wealth, employment and marketplace competition.

"At a time when folks are losing faith in big corporations, the International Year of Cooperatives offers us a great opportunity to showcase the many ways the local, consumerowned and member-controlled cooperative

form of business benefits communities all over the world," declares NRECA CEO Glenn English. "It gives cooperatives a perfect venue to contrast how we differ from profit-driven companies."

Co-ops Are Everywhere

Every day, over 29,200 co-ops supply essential products and services to American

Tomorrow at breakfast, check your morning paper. Many of the articles may be labeled "Associated Press" or "AP." Those stories were written by individual reporters but distributed by a co-op news organization.

If your breakfast includes fresh-squeezed orange juice, it may be from Sunkist—a co-op formed by California and Arizona citrus growers.

And the list goes on: Land O' Lakes butter, Ocean Spray cranberry juice, Sun-Maid raisins, Welch's grape jelly, Nationwide

Cooperative Principles

When introduced into the United States by the National Grange in 1874, and formally written down by the International Cooperative Alliance (ICA) in 1937, the seven cooperative principles evolved into how they are used today. Although stated in many ways, they hold that a cooperative must provide:

1. Open and Voluntary Membership. Membership is open to all persons who can reasonably use its services and stand willing to accept the responsibilities of membership, regardless of race, religion, gender, or economic circumstances.

2. Democratic Member Control.

Cooperatives are democratic organizations controlled by their members, who actively participate in setting policies and making decisions. Elected representatives (directors/trustees) are elected from, and are accountable to the membership. In primary co-ops, members have equal voting rights (one member, one vote); co-ops at other levels are organized in a democratic

3. Members' Economic Participation.

Members contribute equitably to, and democratically control, the capital of their cooperative. At least part of that capital remains the common property of the co-op. Members allocate surpluses for any or all of the following purposes: developing the cooperative; setting up reserves; benefiting members in proportion to their transactions with the cooperative; and supporting other activities approved by the membership.

4. Autonomy and Independence. Cooperatives are autonomous, self-help organizations controlled by their members. If they enter into agreements with other organizations, including governments, or raise capital from external sources, they do so on terms that ensure democratic control as well as their unique identity.

5. Education, Training, and Information. Education and training for members, elected representatives (directors/trustees),

CEOs, and employees help them effectively contribute to the development of their cooperatives. Communications about the nature and benefits of cooperatives, particularly with the general public and opinion leaders, helps boost cooperative understanding.

6. Cooperation Among Cooperatives. By working together through local, national, regional, and international structures, co-ops improve services, bolster local economies, and deal more effectively with social and community needs.

7. Concern for Community. Co-ops work for the sustainable development of their communities through policies supported by the membership.

These principles are underpinned by six ideals—the so-called cooperative values of self-help, self-responsibility, democracy, equality, equity, and solidarity. In addition, ICA lists cooperative "ethical values" of honesty, openness, social responsibility, and caring for others.

Insurance, Ace Hardware, and REI outdoor gear—are all co-ops. In fact, one of every four Americans claims membership in some type of co-op, including 91 million served

by credit unions and 42 million connected to over 900 electric co-ops in 47 states (Michigan has 11 electric co-ops).

While many in number, co-ops differ from "typical" businesses in one big way: they are organized for the benefit of their members, not single owners or stockholders.

"Co-ops are established when the forprofit, investor-owned commercial sector fails to meet a need, either due to price or availability of goods and services," explains Martin Lowery, NRECA

executive vice president of external affairs and chairman of the National Cooperative Business Association Board of Directors. "The co-op business model works in housing, utilities, and in both rural and urban settings. Co-ops empower people to take control over their own economic destinies."

"When you're a co-op member, you have a real say in the direction of that business. That's critical—it helps the co-op rapidly respond to changing conditions. For example, a number of electric co-ops have branched out into other pursuits beyond electricity to meet pressing consumer and community requirements," he adds.

Dallas Tonsager, under secretary for rural development with the U.S. Department of Agriculture, points out that co-ops "are only as good as the people running them and only succeed when members support them. But well-managed, democratically run co-ops have proven time and again that when people unite to achieve a common goal, they can accomplish anything."

On the Cutting Edge

Odds are you have orange juice in your refrigerator. But before a 1916 Sunkist advertising campaign, oranges were only eaten by the slice. By the end of World War I, however, Sunkist's "Drink an Orange" push had increased the average serving size from one-half an orange to almost three.

This pioneering co-op tradition continues in many ways today:

• Credit unions fought off the destructive cycle of payday loans by creating salary



When people unite to achieve a common goal, they can accomplish anything.

advance loans with low rates that placed part of the borrowing into a savings account helping members escape a cycle of debt;

- Marketing co-ops added food nutrition labels to products long before it was required by federal law;
- Electric co-ops lead the way in smart grid implementation—close to one-half have installed advanced metering infrastructure (AMI), with 30 percent integrating AMI or automated meter reading devices with various software applications, such as outage management and geographic information systems.

"Co-ops have made these investments because it makes sense for them and their members," stresses English. "It's an outgrowth of the co-op commitment to innovation—the same spirit that allowed co-ops to overcome seemingly insurmountable technical, engineering, legal, political and financial hurdles in the late 1930s to bring central station electricity to all corners of America. Thanks to our consumer orientation, co-ops work to ensure that all decisions—technology-based or otherwise—focus on their core mission: providing members with a safe, reliable and affordable supply of power."

It is hard to conceive of America without co-ops, Tonsager reflects. "Agricultural coops have made our nation the breadbasket of the world. This occurred, in part, through

lending from the farmer-owned co-op, Farm Credit System, and power-supplied by electric co-ops. Today, electric and telephone co-ops play a vital role in deploying the advanced

> distribution, transmission and telecommunications infrastructure that rural America needs to prosper and stay competitive."

Building a Better World

The IYC 2012 theme also embodies NRECA International Programs, which celebrates its golden anniversary this year. Since November 1962, this program has assisted with electrification projects that have resulted in increased agricultural output, millions of new jobs, and an enhanced quality of life for over 100 million people in 40-plus nations.

These projects are currently under way in Afghanistan, Bangladesh, Bolivia, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Haiti, Pakistan, the Philippines, South Sudan, Tanzania, and Uganda. Despite progress, much work

"Over 2 billion people worldwide still lack electricity and millions more must depend on unreliable and unsafe power," emphasizes Ingrid Hunsicker, program development manager for the NRECA International Foundation, a charitable goup that has partnered with over 300 U.S. electric co-ops to bring power and economic development to rural villages overseas. "In many countries, traditions of self-help, self-government, and joining together to achieve a common goal don't exist. A dismaying array of financial problems, such as a lack of investment capital and little understanding of even the most basic accounting procedures, throw up even more barriers.'

Because circumstances vary widely, NRECA International Programs has adopted the slogan, "Electrifying the world, one village at a time." Outreach relies on the time-tested electric co-op approach—giving individuals, many for the first time, practical experience in democratic decision-making and entrepreneurship so they can launch locally-driven services.

In many cases, volunteer electric co-op line-Continued ⊳

Electric Bills & Weather Patterns

Weather can affect the size of your electric bill.

lectric bills vary with the seasons, driven by weather and consumer use patterns. And, "weather matters" for many reasons, but it also affects your electric bills.

How much weather affects your electric bills depends on many factors, including your home's original construction materials, insulation and air leaks. Personal comfort plays a role too, as does the difference between the thermostat setting inside and temperatures outdoors.

When a house stays at 68 degrees Fahrenheit, but the outdoor temperature varies from minus 20 degrees in winter to more than 100 degrees on a muggy summer's day, demand for heating and cooling can be significant. Cooled air leaving a home essentially wastes the money spent to cool it. The same is true for air a homeowner has paid to warm.

R-value offers a way of measuring insu-

lation's effectiveness (a higher R-value indicates more effective insulation). For example, on a 28-degree day, heat loss from a residence set at 68 degrees could hit 2,464 Btu per hour even through an 80-by-10 exterior wall packed with R-13 insulation. Reverse that situation on a scorching day—100 degrees outside—and heat gain indoors will still reach 2,464 Btu per hour.

To save money, set your thermostat 5 degrees closer (higher in summer, lower in winter) to the outdoor temperature—this simple change could result in a savings of 90 watts per hour of electricity—about 197 kilowatt hours (kWh) in three months. At a national average of 10 cents per kWh, this adjustment keeps an extra \$19.70 in your pocket.

Call your local electric co-op or energy efficiency expert and ask for an energy audit. These specialists can save you hundreds of dollars by uncovering energy waste and making recommendations to improve energy efficiency.

In the meantime, adjust the thermostat. Keep blinds and drapes on the sunny side of your home closed in summer and open in winter. Find mysteriously "hot" or "cold" spots in the house and solve them by installing gasket seals around outlets and weather stripping along doors and windows, replacing old windows, and upgrading insulation. When practical, adjust landscaping to provide shade for your property in summer and sunlight in winter.

Weather doesn't have to play havoc with electricity bills. There are a variety of tools, appliances and resources available to solve all sorts of energy challenges. Some, such as new windows or a roof, require significant financing. But there are a lot of options that are inexpensive and simple to benefit from.

Find more ways to save at TogetherWe-Save.com and michigan-energy.org.

Living Cooperatively, from page 13

workers from the United States head to distant lands for a few weeks to teach their peers safe construction practices. Then NRECA staff instructs local residents on how to maintain simple power grids and run their own utilities.

"One of the challenges we face in many countries is building a rural business culture," indicates Hunsicker. "When electric co-op employees and volunteers arrive, they outline how to create a business plan, conduct meetings, collect the full amount due from consumers, what type of generation system to invest in, and everything in-between. It's all about discovering and building on what works. Best of all, we show the best face of not only who we are as co-ops, but who we are as Americans."

While NRECA's help is not limited to co-ops—municipal electric systems benefit, too—many foreign communities embrace the co-op way. Argentina boasts the largest number of electric co-ops—nearly 800—outside the U.S., while a Bolivian co-op serves over 400,000 members, ranking it as the largest electric co-op anywhere. The Philippines has 119 electric co-ops, Bangladesh 72, and the cooperation imprint can also be seen in Costa Rica, South Sudan, Uganda, and other countries.

Spreading the Cheese

"Cooperation Among Cooperatives," one of the seven cooperative principles (see box, p. 12), delivers great results. "Twenty years ago, as a new brand, we had absolutely nothing—we relied on electric co-ops and credit unions to let us piggyback on their annual meetings for advertising purposes," attests Roberta MacDonald, senior vice president of marketing with Cabot Creamery Cooperative in Vermont.

Flash forward to today and the farmerowned dairy co-op sold 8 million pounds of cheddar in addition to a host of other merchandise in 2011—enough cheese, butter, whipped cream and other items to crisscross the nation more than three times.

"By working with electric co-ops and others we were able to remind co-op members that when they bought Cabot products, they were supporting another co-op," MacDonald adds, recounting trips made in the late 1980s and early 90s to electric co-op annual meetings. "Spreading the word among different co-ops helped us flourish.

Unlike electric co-ops, which are owned by

members—consumers—who receive electricity, dairy producers own Cabot Creamery. Through the co-op, over 1,200 farm operations across New England and upstate New York are guaranteed a market and fair prices.

Group Studies

In Michigan, all nine electric districution co-ops work together to sponsor youth programs for their members' teens from all over the state. For nearly 30 years, these coops have sponsored a three-day leadership conference, now called the Youth Leadership Summit (formerly known as "Electric Co-op Teen Days"), for more than 30 high school students.

Michigan co-ops also sponsor high school students to attend the annual Rural Electric Youth Tour of Washington, D.C. See pages 7 and 10 to learn more about these programs.

Connect to Co-ops

"It's in every co-op's DNA to serve members in the best way possible," concludes Lowery. "That's why co-ops remain the best type of business around."

To find a co-op (of any kind!) near you, visit go.coop or see countrylines.com for a link to your local electric co-op.

Keepin' It Real

usy as a bee, Simone Scarpace has been making jam with hand-picked Michigan fruit for over 30 years and decided to put it to market in 2008.

"Wee do have fun with the business," she says of their family enterprise in Bear Lake called Wee Bee Jammin'. "Wee have passion for what we do," she quips. Simone and her husband Ken enjoy traveling while making jam deliveries to their customers throughout the state, including annual trips to the U.P to pick thimbleberries, blueberries and other wild varieties that grace Michigan's northern woods.

"Wee enjoy the people connection," she explains about why they hand-deliver about 80 percent of their jams. "We have met a lot of great people throughout our 'jam journey,' believing that we are delivering the best jam there is on the market."

From the idea to licensing, finding a kitchen, and inspection, getting our business started took about a year, Simone explains. In December 2011 they moved into their own production facility, where they will soon add a small storefront that carries their jam, along with honey and other Michigan foods, such as chocolate covered cherries, and jewelry, pottery, cards and artwork.

"We make all of our products," Simone says, and all their jams are handcrafted in small batches. When they needed a mild honey for use in one of their jam recipes, daughter Sarah studied to be a beekeeper and created a spin-off company from Wee Bee Jammin' so they could have their own supplier. Another daughter, Stefanie, a chef, helps make their products, and son K.J. helps with everything from picking berries to loading products.

By using only Michigan fruit in their lowsugar recipes, Simone says consumers are getting a high-quality jam made with pure, simple ingredients. The jams have catchy names like "Blueberry Bog" and "Saskatoon," but their hands-down bestseller is called "Toe Jam," which is made with strawberries, cherries and chunks of apples and peaches that remind them of big toes.

Deliveries are made to over 70 Michigan







Top: Stefanie Scarpace makes "Just Peachy" preserves at the Starting Block Kitchen in Hart. Bottom: Ken and Simone Scarpace are the owners of Wee Bee Jammin', which specializes in making jam from Michigan fruit, and other good stuff. Visit at weebeejammin.com or call 231-510-9500.

retailers, and cities such as Atlanta, Chicago and New York City. They have an internet store at weebeejammin.com and etsy.com.

The Scarpaces also buy fruit from Michigan farmers, including raspberries from Erwin's Orchards (South Lyon), and saskatoons and blackberries from Putney Farms (Benzonia).

Saskatoons are new to Michigan, and Simone believes Wee Bee Jammin' is the first Midwestern company to make saskatoon jam. "We have worked closely with those responsible for bringing this superfruit to Michigan," she adds. "They are high in fiber and antioxidants and are grown on specialty farms in northern Michigan."

"Wee take pride in what we do, and listen to our customers. It's hard work, but it's worth every minute," Simone adds. "What wee need is more time. Wee are Beesy!"

Tell us about your favorite, or a unique, Michigan-made product. Email czuker@ meca.coop or send to: Country Lines, 2859 W. Jolly Rd., Okemos, MI 48864. Be sure to share why you like it, or a unique story to go with it.

Finding Quality Child Care For a High-tech Generation

remember when a day in Grandma's care called for cookie-baking and board games. These days, 2-year-old Annie's first question for me is likely to be: "Did you bring your iPad?"

Like children of every generation, our grandchildren love learning while being entertained, and few tools combine fun and learning as well as today's technology tools. The colors, sounds, variety and instant feedback that mobile apps offer make them especially appealing to young children. What's more, technology tools can provide powerful learning experiences, making them musthave components for educational settings.

More than a "sitter"

Even child care is now considered "early education," where caregivers pay careful attention to early learning—even for babies. When choosing child care, today's parents are urged to look for more than just comfort and convenience.

That's because we now know the early years of a child's life are a critical time when the brain is forming connections that help determine a lifetime of skills and potential, affecting the way that children think, learn and behave.

Child care that provides a loving, safe, stable and age-appropriate stimulating environment helps children enter school safe, healthy and eager to succeed. With stakes this high, parents deserve to settle for nothing less than high-quality child care that will ensure their child's healthy physical, emotional, social and intellectual development.

Quality and stability count right from the start

Stability is an especially important factor when it comes to choosing care for infants. That's because babies need more sameness in their lives than the rest of us do-especially when it comes to the people who take care of them every day. The more caregivers a child has during his early years, the harder it will be for him to feel secure and to trust the people who care for his needs. And trust is important, because it

forms the basis for future relationships.

Making a lasting choice starts with parents asking themselves some questions:

What qualities are you looking for in caregivers, themselves? How important is experience, training, religious background, discipline beliefs, and flexibility?

What kind of setting are you looking for? Do you want someone to come to your home? If looking outside your home, do you prefer a small setting or a larger one? Are you looking for structured activities or for a place



How many is too many?

The American Academy of Pediatrics (AAP) recommends that one adult should have the primary responsibility for no more than one baby under 12 months of age in any care setting. Babies need positive, consistent caregivers who learn to recognize their unique cues for hunger, distress and play. This kind of nurturing interaction contributes significantly to an infant's social and emotional growth.

AAP guidelines for *overall* child care:

Tital galacimies for overall erina care.		
	CHILD:STAFF	MAX. GROUP SIZE
th-24 mos.	os. 3:1	6
30 mos.	4:1	8
35 mos.	5:1	10
rs.	7:1	14
yrs.	8:1	16
th-24 mos. 30 mos. 35 mos. rs.	os. 3:1 4:1 5:1 7:1	6 8 10 14

that focuses mostly on free play?

What hours do you need care? What about the weekends? Do you need after-school care?

What kind of extras do you need? Do you need the center to provide transportation to and from school? What about sick child care?

Do you qualify for subsidies? Families who qualify for child care subsidies are required to use only licensed or registered child care providers, even if they are relatives or inhome babysitters.

What—realistically—can you afford, not just today, but if your budget takes a hit from future pressures?

Take the search to the cloud

Once families have answered those questions, they can research what's available in their area and begin making calls and scheduling visits. Again, technology makes the task easier with online directories and guidelines. Michigan

Great Start Connect (greatstartconnect. org) even offers downloadable checklists to help you remember what to ask and observe while you visit.

The most important person to observe, however, is the child. Parents will know if they've found the right place and person in the way caregivers interact with their child and the reaction the child gives to them. After several observations, parents should go with the option that feels right for them and their children. If at the end of your interviews none of the caregivers meet your expectations, there's no need to settle for best of the worst. Instead, it's time to review family values and begin the search again.

Provider-parent connections there's an app for that!

Once you've enrolled, it's important for parents to stay connected. These days, technology offers both parents and providers more tools for staying in touch, through video streaming of activities, digital photos, blog posts, e-newsletters, or even emails and text messages throughout the day.

Turns out, there are even mobile apps, such as "Child Care Daily" and "Tadpoles Day Care" that help keep parents and providers connected. These apps can offer added peace-of-mind while allowing parents to "watch" their child's daily activities on their smartphone or iPad.

Assuming, of course, parents can wrestle the devices from their kids when they say

The Nature of Things

For nature writer Jerry Dennis, curiosity is the drive.

saying goes, but for Jerry Dennis it's a driving force. His curiosity and way with words has established the Traverse City-based author as one of the nation's outstanding nature and outdoor writers, with a growing list of published books and magazine articles. His articles have appeared in the Smithsonian,

uriosity killed the cat," as the old

Audubon and National Geographic magazines, as well as the New York Times.

His latest book, "The Windward Shore: A Winter on the Great Lakes," is published by the University of Michigan Press. It resulted from an accident—an ill-timed leap for a basketball in a "skins and shirts" game which ended with an injured knee. Repair required surgeryand a long period of rest and recovery.

That enforced down-time allowed him to begin a long-planned book related to his favorite subject, the Great Lakes. This time his focus turned to the coastal shorelines of lakes Michigan and Superior. The result? A gentle, thoughtful and enjoyable look at another facet of Michigan's natural world.

During his recovery, thanks to the generous offers of friends, he isolated himself at a lakeshore lodge in the Leelanau Peninsula and a cabin on Superior's shore. His curiosity and quiet observations about the very nature of a shoreline, and the water, wind, land and geology that make it unique, led to this latest in books.

Human use and development of the shorelines has not always been gentle or wise, and Dennis worries over these accrued abuses.

"The older I get and the more I study, travel and talk to people, the more I realize how complex the Great Lakes are—and that the problems that face them are complex too," he said. "It was kind of an important moment when I finally allowed myself to realize how complex it is. Yet I still get excited to be on or near the Great Lakes.

It was curiosity that led to several of the author's earlier books on subjects as varied as: a bird that flies into waterfalls to feed; hiking with a fishing friend far into a remote stream area only to

discover a man and woman fly-fishing in the nude (one of the short stories in his book, "The River Home"); paddling a canoe with a friend into the north country woods and wilds; or talking his way into crewing on a yacht in the Chicago to Mackinac race. On that latter adventure, curiosity did demand a penalty for pushing it.

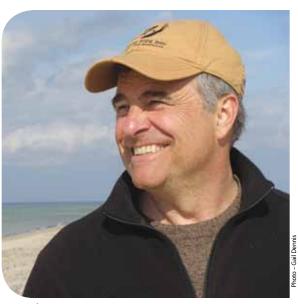
"I was determined to get on one of those boats to know what it was like to be in that race, even though I'm not a sailor. I naively went down to the Chicago Yacht Club before the race and asked for a spot on a boat. Of course nobody wanted a greenhorn so I had a heck of a time getting on; but luckily, a halfhour before the race, one sailor's wife fell and broke a leg. They needed a replacement in a short time; I happened to be in the right place at the right time.

"I did get terribly seasick," he laughed, "and after a few hours there may have been discussions about throwing me overboard. But I recovered and we did fairly well by placing in the top half of racers."

Dennis and his wife Gail live in a 140-yearold farmhouse on the Mission Peninsula in Grand Traverse Bay; their two sons are now grown and on their own.

He remains involved locally in the effort to remove old power dams on the Boardman River, in nature and educational lecturing, and of course, in letting his curiosity lead him to his next book—planned for release in 2012.

Jerry Dennis is a man who loves the Great Lakes and listens to his curiosity when it speaks to him. We who enjoy a good read are glad he does.



Books by Jerry Dennis

"The Living Great Lakes"

"Leelanau: A Portrait Of Place In Photography and Text"

"From a Wooden Canoe"

"The River Home"

"The Bird In The Waterfall"

"A Place On The Water"

"It's Raining Frogs And Fishes"

"Canoeing Michigan's Rivers"

Don Ingle is an avid outdoorsman and awardwinning outdoors writer that submits regularly for Country Lines.





Eating on a budget doesn't have to mean giving up flavor. Try these savory, stress-free recipes and put dinner on the table for less! Find hundreds more recipes at countrylines.com.

Caprese Pizza

1 T. olive oil

3 T. pizza sauce

1 pre-made whole wheat or white pizza crust (12-14 ounce size)

8 ozs. fresh mozzarella cheese

2 T. balsamic vinegar

3/4 of 12-oz. jar of diced tomatoes (with olive oil and garlic)

2 T. chopped, fresh basil leaves

Preheat oven to 425°. Mix olive oil with pizza sauce and spread onto pizza crust. Cut mozzarella cheese into 1/4-in.-thick slices. Place mozzarella in a small bowl and coat with balsamic vinegar. Chop tomato into 1/4-in. pieces and lay on a paper towel to soak up excess liquid.

Arrange tomatoes in concentric circles around the crust. Sprinkle the basil and lay

the mozzarella pieces on top, making sure all ingredients are evenly distributed around the crust. Bake for 12-15 minutes or until desired crispness.

Chicken Parmesan (pictured above)

1 large egg (or egg white)

1 c. Italian-seasoned bread crumbs

4 boneless, skinless chicken breasts (about 1 lb.) 2 T. olive oil

1 (24-oz.) jar spaghetti sauce

1 c. parmesan cheese

1 c. mozzarella cheese

Preheat oven to 350°. Heat skillet with olive oil over medium heat. Place egg white in bowl. On a cutting board or flat surface, spread bread crumbs. Take each chicken breast, dip into egg and coat with bread crumbs. Place chicken in skillet and cook on each side 2-3 minutes or until browning. Remove and place into baking pan. Cover with spaghetti sauce. Add cheese. Bake for 20 minutes or until cheese is fully melted. While baking, cook spaghetti noodles until done. Serve the Chicken Parmesan on a bed of spaghetti noodles. Sprinkle with parmesan cheese, if desired. Serves 4.

Meet County Lines' new recipe editor, Christin Russman!

"I really love to cook, bake and experiment in the kitchen. I've been refining my craft over the past few kitchen. I've been refining my craft over the past few years and friends have suggested that I start a blog years and friends have suggested that I start a blog years and friends have suggested that I start a blog years and food. In it, I create original, that. It's **busychickrecipes.com**. In it, I create original, that. It's **busychickrecipes.com**. In it, I create original, healthy recipes for busy people. If I could, my job healthy recipes for busy people. If I could, my job would be to travel around the world, experiencing

different cultures and food!

I am also lead instructor at Specs Howard School
of Media Arts in Farmington Hills and a freelance
of Media Arts in Farmington Hills and a freelance
videographer and editor. I am newly married and
have a cat named Chloe. I'm a salsa dancer in my
spare time, and I'm learning Japanese."



Chicken Quesadillas

2 (12.5-oz.) cans shredded chicken 2 T. water

1 taco seasoning packet (1.25 ounces) 1 c. "pico de gallo" style salsa, or chunky salsa 4 flour tortillas

1 c. shredded Mexican cheese

Preheat oven to 350°. In medium skillet over medium heat, cook chicken until warm. Add water, taco seasoning and salsa. Stir together. On a baking sheet covered in aluminum foil, place two tortillas. Scoop chicken mixture onto tortillas and spread evenly. Sprinkle with cheese and top with the other tortillas. Bake for 5-7 minutes or until cheese is fully melted. Cut with pizza cutter into small triangles. Makes 2 quesadillas.

Turkey Chili

1 pkg. (1.5 lbs.) lean, ground turkey meat 1/2 small white onion, diced (about 1/2 cup) 2 cans (14.5-oz.) tomato sauce 1 can (14.5-oz.) diced tomatoes 1 can (4.5-oz.) diced or chopped green chilies 1 (14.5-oz.) can chili beans 1 pkg. (1.25 ounces) chili seasoning mix Brown the turkey meat and onion in a large skillet over medium heat. Drain. Return meat to pan and add the tomato sauce, diced tomatoes, green chilies, beans, and chili seasoning mix. Reduce heat to medium and let simmer. Top with sour cream and

Red Beans & Rice with Sausage

1 c. beef broth or bouillon

1/3 c. diced celery

cheese, if desired.

1/3 c. chopped onion

1 clove minced garlic

1 can (14.5-oz.) petite diced tomatoes, undrained

1 can (15.5-oz.) chili beans

1/3 c. diced green pepper

1 t. oregano

1/2 t. cumin

1/4 t. pepper

3-6 drops Tabasco green pepper sauce (optional)

1 c. Minute Rice®, uncooked

1 14-16 oz. package smoked sausage, cut crosswise into 1/2-inch slices

In large non-stick skillet, bring broth to a boil. Add celery, onion and garlic. Cover, reduce heat, and simmer 5 minutes. Add remaining ingredients; mix well. Cover and simmer until liquid is absorbed, about 12-15 minutes.

Mary Ellen Sequin-Adomat, Traverse City

Turkey and Dressing Roll-ups

8 medium slices deli turkey 1 box chicken or turkey Stove Top Stuffing® 1 can cream of mushroom soup 1/4 c. milk

Prepare the stuffing as directed on the box; cool. Lay turkey slices on counter, pat dressing evenly on each slice and roll up. Put into a 8x8-inch glass baking dish. Mix soup and milk together and pour over roll-ups. Heat covered in microwave 3-4 minutes, or in oven at 350° until warm. Serve with dinner rolls. 4-6 servings.

Patty Young, Sterling Heights

Harvest Supper

1-11/2 lbs. smoked sausage 32 ozs. sauerkraut 1 small onion, chopped 3 apples, sliced 4 med. potatoes, sliced 1/2 c. water 2 t. sugar

Mix all but the sausage together in a large skillet, cover and simmer for 45 minutes. Place the sausage on top, cover and simmer

15 minutes more. Serves 4-6.

Shirley Dunbar, Constantine

Meal-In-One Ham Casserole

2 c. cubed ham

1 c. cooked rice

1 can cream of mushroom soup

1 c. chopped celery, parboiled and drained

1 c. mayonnaise

1 T. grated onion

1 T. lemon juice

3 hard boiled eggs, chopped

1 c. frozen mixed vegetables

1 c. crushed corn flakes

Mix together all but the corn flakes and place in a well-greased 2-quart casserole dish. Sprinkle corn flakes over top. Bake at 375° for 45 minutes. Serves 8.

Emma Jean Bowerman, Lake Isabella

Taco Lasagna

1 lb. burger 1 small onion 1 can refried beans 1 can black beans, drained 1 can corn, drained 1 packet taco seasoning 1 1/2 c. salsa 8-oz. shredded cheddar cheese 9 lasagna noodles

Brown burger with onion; add refried beans, seasoning and salsa. At the same time, cook lasagna noodles. Using a cake pan, begin by putting three lasagna noodles in the bottom. Top with one-third each of meat mixture, black beans and corn and a little of the cheese. Repeat two more times, ending with putting more cheese on the top. Bake for 40 minutes at 350°, or until cheese on top begins to brown.

Beth DeVos, Reed City

NEW THIS YEAR! Contributors whose recipes we print in 2012 will be entered in a drawing. We'll draw one winner in December and pay their January 2013 electric bill (up to \$200) as a prize.

Thanks to all who sent in recipes! Upcoming: Please send in your MEATLESS MEALS recipes by Jan. 10 and **MEDITERRANEAN** recipes by Feb. 10. Mail to: Country Lines Recipes, 2859 W. Jolly Rd., Okemos, MI 48864; or email recipes@countrylines.com.



Geothermal — Is it the **Heating System for You?**

eothermal heat. We have all probably heard more about it lately, and it's not surprising given the high cost of home heating fuels, such as fuel oil, propane, and even corn. But what is it and how does it work?

Well, in simple terms it means "heat from the earth" and it has been used for centuries whether it was to feed the public baths and underfloor heating in first century Rome, or to heat greenhouses in Boise, ID, around the turn of the 20th century.

Today's technology is essentially the same, but does not require that you have a natural hot spring near your home to take advantage of the earth's heating and cooling capability.

The "geo" unit uses a compressor—or "heat pump"—to force the transfer of heat with the ground, through either an open or closed loop system, providing your home with clean, efficient heating and air conditioning (see related story, p. 23).

Today's geothermal units can be over 400 percent efficient, meaning that for every dollar you spend in electricity you are receiving \$4 worth of heat. Comparatively, the very best gas furnace is 93 percent efficient, as heat will be exhausted from the home during the combustion process.

What does this mean for you?

Let's compare an 80 percent efficient fuel oil furnace, a 93 percent efficient propane furnace, and a 400 percent efficient geothermal furnace. Take a home with a heat loss of 45,000 Btus, and we can compare these three furnaces based on their ability to replace those Btus and the cost of the fuel.

All set to 70 degrees, the fuel oil furnace with a cost of \$3.50 per gallon will have an annual operating cost of \$3,550. The propane furnace at \$2.25 per gallon would be \$2,850 and the geo on Thumb Electric's dual-fuel controlled rate would be \$632 per year. By doing the math, we can see the savings.

Is geothermal expensive to install? Well it depends on how you look at it.

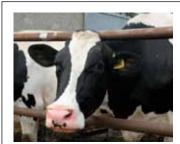
Let's use the fuel oil furnace above as an example and subtract the \$632 annual cost of the geo from the cost of the fuel oil furnace (\$3,550). You come up with savings of \$2,918 per year. Lets now assume a geo system costs \$15,000 to install (costs will vary) and you qualify for the 30 percent federal tax credit currently available until Dec. 31, 2016 (talk to your accountant). That puts your net cost at \$10,000.

Now, divide the \$10,000 by the \$2,918 in annual savings and the result is 3.43, which is the number of years it would take to pay off the initial investment. I like to say you can pay the fuel man or you can pay for the geothermal furnace and pocket the savings each month after the payback date.

Now, everyone's home is different and savings will vary. Thumb Electric offers its members, free of charge, an in-home energy analysis. We will measure up your home, assess its insulation and weatherization, and show you what your current heating system costs to operate, as well as alternate systems such as geothermal. We will also show you what adding insulation and weather-sealing your home can do for you.

Your cooperative also has an energy efficiency loan program for qualifying measures, such as new windows and doors, insulation, and efficient furnaces including geothermal and air source heat pumps. You can borrow up to \$15,000 for up to seven years at 7 percent interest (see more about this on page 9).

In the coming months, I plan to stop and talk to members who have installed energy efficient heat systems like geothermal and hope they will share their experience with me so I can pass them on to you. Until then, ask your co-op neighbor who may have installed a geothermal system, and get their opinion. Or call us, we'll be glad to schedule an appointment and show you if you can save money on home heating.



Attention: DAIRY FARMERS

Thumb Electric Cooperative continues to provide trained personnel to help you solve your neutralto-earth voltage problems. If you think you have neutral-to-earth voltage, please call us at 800-327-0166

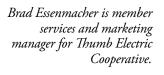
We also offer FREE farm energy audits!

Notice to Members of Thumb Electric Cooperative Case No. U-15821 2010 Renewable Energy Plan Annual Report Summary

The Michigan Public Service Commission (MPSC) requires all Michigan electric utilities to get approximately 2 percent of their power supply from renewable sources by 2012 and increasing to 10 percent by 2015.

Under this requirement, Thumb Electric Cooperative submits an annual report to the MPSC regarding its Renewable Energy Plan. In 2010, Thumb acquired approximately 1,326 megawatt hours (MWh) of renewable electricity as a slice of system from its wholesale power supplier Detroit Edison.

A full copy of the cooperative's Renewable Energy Plan annual report that was filed with the MPSC is available on the cooperative's website at tecmi.coop or by request at the cooperative's office.







Green Thumb Home Heating

Geothermal is a simple technology that uses the earth's renewable energy to provide high-efficiency heating and cooling. In winter, the system draws heat from the ground and transfers it to your home. In summer, it extracts heat from your home and transfers it to the ground. Contact the energy experts at Thumb Electric Cooperative at 800-327-0166 for honest answers on your energy choices, or call any of the trained and certified installers listed here.

All-Temperature Geothermal Systems 1000 E. Sanilac Rd., Caro, MI 48723 989-673-5557

Ameriheat, Justin Faber

2891 E. Forester Rd., Deckerville, MI 48427 810-376-4534

B & D Heating, Cooling & Plumbing 1148 North Van Dyke, Bad Axe, MI 48413 800-515-1117

Burkhard Plumbing & Heating 638 E. Huron Ave., Bad Axe, MI 48413

989-269-7532

Climatech

3274 S. Main St., Marlette, MI 48453 989-635-COOL

Cosenza Plumbing & Heating, Inc. 6725 E. Sanilac Rd., Port Sanilac, MI 48469 810-622-8347

ES Sheetmetal, Gene Root

9450 Belsay, Millington, MI 48746 989-871-2067

Geo Renew Systems, Inc.

3045 Grange Hall Rd., #7, Holly, MI 48442 248-531-0325

Geomasters, Inc., Plumbing & Heating 57 Ward St., Croswell, MI 48422 810-679-2251

Holland Heating and Cooling

9160 Lapeer Rd., Davison, MI 48423 810-653-4328

Ingell Refrigeration

1115 4th St., Port Huron, MI 48060 810-982-4226

J & B Plumbing & Heating

7641 Pigeon Rd., Pigeon, MI 48755 989-453-3931

Jack McCain Plumbing & Heating 9651 Weale Rd., Bay Port, MI 48720 989-453-2277

Kowaleski Heating & Cooling, LLC 3977 Ruppel Rd., Port Hope, MI 48468 989-428-3371

Kulek Heating & Air Conditioning 14421 Jeddo Rd., Yale, MI 48097 810-387-4452

Kundinger & Kroll

31 E. Main St., Sebewaing, MI 48759 989-883-2770

Lakeshore Improvements Plumbing & Heating

7825 Big Gulley Rd., Palms, MI 48465 989-864-3833

Michigan Energy Services

8445 Main St., Whitmore Lake, MI 48189 888-339-7700

Newton-Johnson Plumbing & Heating

112 N. Main St., Vassar, MI 48768 989-823-2341

Orton Refrigeration

31 W. Sanilac Rd., Sandusky, MI 48471 810-648-2252

Preferred Heating

7736 Arendt, Melvin, MI 48454 810-378-5454

Priority Service by Porter & Heckman

3056 Davison Rd., Lapeer, MI 48446 810-644-8576

Shetler Plumbing & Heating

7184 Nitz St., Pigeon, MI 48755 800-547-3651

Signature Heating & Cooling

35585 Pratt Rd., Memphis, MI 48041 810-392-3869

Superior, Inc.

3442 Cemetary Rd., Cass City, MI 48726 989-872-3305

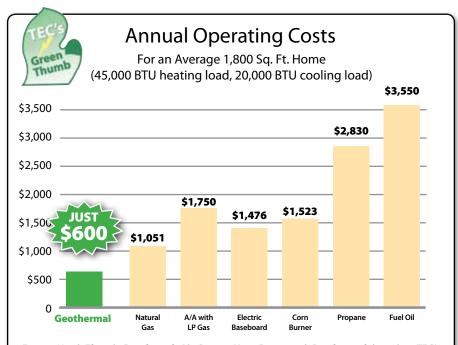
Thumb Cooling & Heating

5599 Pochert Rd., Port Hope, MI 48468 989-428-4948

And: 837 South State, Caro, MI 48723 989-672-4948

Volante Heat Transfer

3609 Lake George Rd., Dryden MI 48428 810-796-3313



Factors Used: Electric Baseboard, Air-Source Heat Pump and Geothermal-based on TEC's 6.05¢/kWh dual-fuel rate. LP gas-based on \$2.25/gal. and 90% efficient furnace. Fuel Oil-based on \$3.50/gal. and 80% efficient furnace. Natural Gas-based on \$1.08/therm., 90% efficient furnace including \$9/mo. service charge. Corn-based on \$4.38/bushel. (Electric baseboard and corn operating costs do not include air conditioning.)



Transformers lower voltage to a level that's safe for use in your home.



Reclosers protect lines and consumers from short circuits and allow temporary faults to clear, which helps keep service energized without needless interruptions.



Capacitors improve the power on the lines they prevent it from being wasted and help boost the voltage on long distribution lines.

A Spotter's Guide to Distribution Poles

ver look up at a utility pole and wonder: "What is all that stuff?" While wires are easy—everyone knows they carry electricity—how about those attached metal boxes and other mysterious gadgets? What are they called, and what purpose do they serve?

With a little information, you can understand a lot more about the utility lines you pass every day. Not only could "pole spotting" shed light on the work done by your local electric co-op, you just might be able to impress your friends and family. A guide to pole-spotting follows. Please keep in mind:

Utility poles are not for climbing! Looking is okay, but keep a safe distance from all equipment described here.

The measurements and descriptions given here represent common configurations, but in the real world, design varies greatly. Part of why electric co-op employees undergo such extensive training is to enable them to identify components in the field with a high level of confidence and certainty.

Transmission vs. Distribution

First, make sure that the pole you're looking at is a distribution pole and not a transmission pole.

Distribution poles are those you see in your neighborhood, unless your distribution lines run underground. They are generally up to 55 feet high and made of wood. Power running through distribution lines ranges from 4,600 volts to 33,000 volts.

Transmission lines are designed to carry electricity longer distances and at higher voltages-69,000 volts and above. Relative to distribution poles, transmission poles are much larger—from 55 feet to over 100 feet with the conductors higher off the ground. Some large transmission lines use steel poles and tower structures.

In cases where a pole carries both transmission and distribution lines, the transmission lines will run above distribution lines. An easy rule to follow is the lower the voltage of the line, the lower it is on the pole.

Four Common Devices

- Transformers are something most people can already spot—they're hefty metal cylinders that hang off the poles. The transformer that connects your home to a distribution line lowers the distribution voltage to what you need in your house—generally 120 volts for outlets and 240 volts for your air conditioner and clothes dryer. At the top of a transformer, you'll see bushings—ceramic projections with several disks running around the outside. On the inside of bushings are metal conductors; the outsides are insulators, so that when they attach to a transformer the metal casing doesn't become electrically charged.
- Capacitors look somewhat like transformers, with bushings on top, but have flat, rectangular casings. While transformers change voltage, capacitors improve the power factor on the utility lines—they prevent power from being wasted and help boost the voltage on

long rural distribution lines.

- **Reclosers** protect lines and consumers from short circuits. For example, if a tree branch touches a line, electric current will flow through the tree, burning it and overheating the wire. Eventually, this will result in a fault that causes a protective device, like a fuse or circuit breaker, to operate and interrupt the power. Circuit breakers "open" the circuit, cutting off the power. Because many shorts correct themselves in a few seconds—as the high current will usually burn a tree limb away from the line-most modern circuit breakers have a mechanism that allows them to reclose a moment later (hence the name recloser). Like transformers and capacitors, reclosers also have bushings. They tend to be rectangular, like capacitors, but squatter.
- Fuses are also designed to protect lines and homes from short circuits. But fuses are one-shot devices—a fault, like the tree branch described above, on the load side of the fuse will cause them to burn out. High-voltage fuses look like a bar offset from the pole by one or more insulators. When a fuse blows, lineworkers have to go out and find why the fuse blew, fix the problem, and re-fuse the line to restore power. These four devices are the most common on distribution poles. Once you know what they look like, you'll realize you've been seeing them every day for years.
 - Maurice Martin, Cooperative Research Network

Heating and Cooling: Weigh Your Options

Whether it's a heat pump or portable air conditioner, you have many energy-efficient choices when replacing your heating and cooling system.

t can make economic, environmental and lifestyle sense to switch to an entirely different type of heating source for your home. The cost of fuels, such as natural gas, propane, heating oil and electricity, have shifted dramatically over the past decade. Many new heating systems last 20 years or more, so with wide variations in fuel costs, long-term estimated operating costs and paybacks are not always reliable.

Electricity prices are the most stable and will probably continue that way. For homes heated with electricity, air-source or geothermal heat pumps make good sense because they can both heat and cool efficiently.

A standard air-source heat pump is basically a central air conditioner with a few extra parts. The outdoor unit looks exactly the same as a central air conditioner. It is called a heat pump because it pumps heat out of your house (cooling mode) or into your house (heating mode) to or from the outdoor air around the outdoor compressor/ condenser unit.

Geothermal heat pumps also provide the highest efficiency and lowest year-round utility bills. While geothermal heat pumps have boasted much higher initial installation costs (due to the need to place loops, or tubing, to run through the ground or to a well or pond), the federal stimulus bill provides consumers (through the end of 2016) a 30 percent tax credit on the cost of putting in a geothermal heat pump system, which makes them much more affordable.

The primary advantage of installing a heat pump of any kind is they can be used yearround for both heating and cooling. This provides year-round savings and shortens the payback period. In contrast, a super-efficient furnace gets used only during winter and a central air conditioner only during summer.

I also use a portable heat pump to heat and



A super-efficient geothermal heat pump, with and without the front cover. Notice the large air cleaner and water fittings for also heating hot water.

cool my own home/office for year-round savings. It produces 14,000 Btu per hour (Btuh) of cooling and 11,000 Btuh of heating. This is much more heat output than a standard electric space heater using the same amount of electricity during winter.

The efficiency of a portable air conditioner is similar to a window air conditioner. Although this is less efficient than the newest central air conditioners, it can still save you money. By keeping just one or two rooms comfortably cool with clean air, you can set your central thermostat higher and save electricity overall. Since it's on castors, you can use it in the dining room for dinner, roll it into the living room for TV, and so on.

Most operate on standard 120-volt electricity, so they can be plugged into any wall outlet near a window.

A portable air conditioner/heat pump operates similar to a typical window unit. The internal rotary compressor, evaporator and condenser function in the same way. The main difference is that it is on castors and rests on the floor.

When choosing a heating and cooling system, there are other intangible factors to consider. Every type of system requires some maintenance, which can increase the overall

James Dulley is a nationally recognized mechanical engineer writing about home energy issues for the National Rural Electric Cooperative Association.



costs. A heat pump requires about the same amount of service as an air conditioner.

Send your inquiry to James Dulley, Michigan Country Lines, 6906 Royalgreen Dr., Cincinnati, OH 45244 or visitdulley.com.

Turn Your House Into A Power Plant. **Save Up To \$500.**



Just like trees, geothermal heating and cooling systems produce energy from the sun and the earth. Learn how you can cut heating bills by up to 70%, and generate a discount coupon worth up to \$500, at earthcomfort.com. This is on top of a 30% federal tax credit. Find a dealer and invest in lower heating bills now.

earthcomfort.com

Michigan Geothermal Energy Association

NEW! Programs to Help Control **Your Electric Use**

his is the time of year when it's nice to bring things back into balance. All that yuletide and holiday fun can be hectic and expensive, after all. Well, good news! There are now rebates and incentives available from your cooperative to help manage your electric bill.

Your cooperative is part of a collaborative group of Michigan electricity providers that offers Energy Optimization programs that serve valuable members, like you. These programs help reward your energy-saving actions.

New year. New programs. New ways to save.

Beginning in 2012, there will be new and improved Energy Optimization programs from your cooperative. These updated programs will help you get more from your cooperative—more comfort, more savings and more living. Plus, you'll gain understanding and information on how to better

Thumb Electric Cooperative will offer:

- Home energy audits
- Business programs
- Weatherization
- Appliance recycling
- Farm services
- Appliance rebates
- HVAC rebates

* Not all programs may be offered, contact your cooperative or call 877-296-4319 to see what is available to you.

manage your energy use.

An energy efficient home also saves you time and can resolve common problems like mold, ice dams and drafts. Energy Optimization programs can make your home more durable and resistant to the elements, too.

Check it out

The next time you visit your cooperative's office, ask what Energy Optimization programs are available to you. You can also visit michigan-energy.com or call 877-296-4319 for more details.

You must be a Michigan resident and electric co-op member to be eligible for these programs. Other restrictions may apply. Visit michiganenergy.org for a complete list of participating utilities. .





An Open and Shut Case

Garage doors add convenience and security, but should be inspected regularly.

utomatic garage doors may be a routine part of leaving and arriving home, but you should be aware of the potential for injury. Underwriters Laboratories Inc., recommends these tips to make garage door safety an open and shut case:

Always keep automatic garage doors fully open or fully closed. Some folks may leave a small opening at the bottom for pets to get in and out for food or shade. But a small opening could also be an invitation for a child to try to crawl through and get stuck. Another push of the button could send the heavy door down—causing injury—instead of bringing the door up when trying to free anyone stuck underneath. If you encounter someone stuck in an automatic door, call your local fire department.

Read instructions on how to operate and maintain your garage door properly. Check your automatic door monthly to be sure safety precautions are working. Many garage doors boast a safety feature that triggers an automatic reversal if anything is encountered while closing. To check, place a 1.5-inch object (like a flat 2x4) in the path of the door to make sure the door correctly reverses when contact is made. Instructions should also advise on maintaining a properly balanced door. Call a qualified repair company for service or maintenance.

- Do not allow children to operate a **garage door.** It may seem like a harmless, simple task to allow children to push the garage opener. But activating heavy equipment should be taken seriously.
- Avoid walking under a door that is opening or closing. You never know when a malfunction may take place. Steer clear of a moving door.
- Know when and how to use the emergency release. You'll find a cord with a handle hanging along the track of your garage door. Always use caution when using this release, and only use it when the door is fully closed.

An automatic garage door opener is a common convenience powered by electricity. Just as electricity demands safety and respect, so does the equipment it operates.

-Kelly Trapnell

Is Levelized Billing For You?

f you are a budget-minded person, Thumb Electric Cooperative's (TEC) levelized billing program may be right for you.

How does it work?

To figure what you must pay each month, the co-op takes the following steps:

- Each month, the previous 11-month kilowatt-hour usage is added to the current-month kilowatt usage.
- The 12 months of use is divided by 12 to obtain a monthly average kilowatt consumption.

- These kilowatts are then billed at the current monthly rate.
- For each month thereafter, the same formula is used.

What is the advantage?

There are no high or low billings. For example, with standard billing, winter kilowatt usage tends to be higher than summer usage.

Unlike our budget billing program, there is no catch-up month. Under budget billing, you are billed a fixed amount each month for 11 months. On the 12th month, you are billed for those kilowatt hours to catch



up for the year. With levelized billing, your monthly bills remain within a few dollars of the previous month's bill.

How do I qualify?

To qualify for levelized billing, you must have a good credit record, remain current with monthly payments, and have 11 months of billing history.

Let levelized billing work for you. For more information, call TEC at 989-658-8571 or 800-327-0166.

A Life of Curveballs

ife hits some people harder than others. You can say that the trials of Job build character and resilience, test faith, or are simply the cost of living. But sometimes it seems the pain is unfairly dealt.

I was a hospital patient in the past year, enjoying the relative peace of a weekend stay, when my quiet space was shattered as the other bed in my room became suddenly occupied by a large, bearded man with a booming voice. I'll call him Roger. He looked like a gray-haired Santa Claus. He was there because he had been in a car accident and was experiencing blackouts. His daughter had brought him to the emergency room, then left him.

He was attended to by a half-dozen orderlies and nurses, who arranged him on the bed, hooked up monitors to track his vital signs and drew the privacy curtain between us. Privacy, though, was not what Roger got. As you may know, there's not much privacy in a shared hospital room. You will share more intimate details there with a complete stranger than you would want to share with your family.

We talked a bit, and then a nurse and a social worker showed up to get details about his current health issues. Of course, I heard everything.

Roger had a recent history of feeling faint, but more so since the accident, which totaled his car.

He had a bad back, the result of previous car accidents and a work life of physical labor.

His weight problem was obvious. He had diabetes and was trying to control it by watching his diet.

He got winded easily because he had reduced lung capacity. He smoked. He was trying to stop.

Walking was difficult without a cane because of the arthritis in both of his knees. And one leg was shorter than the other.

From time to time, stomach pain flared up. He chewed Tums.

His blood pressure was too high. He

was on a statin medication to bring his bad cholesterol level down.

He was a recovering alcoholic and had used drugs.

He had joined the Army at the end of the Vietnam War. Afterwards, he worked on Great Lakes ships, then as a carpenter. Now his health prevented him from working. He's 56.

He was on the verge of divorce, still living with his wife, but no longer talking to her. His high-school-age son was living in the house, but his wife let the boy drop out of school because, he quotes her: "He doesn't like it. Larry just has to be allowed to be Larry." From the way Roger says this, you know this bothers him more than all the troubles he has.

Life was throwing Roger more curveballs and sliders than Justin Verlander. And Roger wasn't a good hitter. He was striking out.

The son visited later in the afternoon. Larry is as tall as his father, but thin, with long hair. He looks like a typical teen and I wanted to yell "Go back to school!" when he left, because without an education he's starting out with the count 0-2 against the toughest pitcher in the game. I wanted to say "Look at your dad. That's you in 40 years." I'm sure his dad would have agreed.

I left the hospital the day after Roger got there, and it's not likely I'll ever see him again. I like to think that he got healthy for a while, got to enjoy using the strength his body once had, got on good terms with his wife and daughter, and saw his son go back to school. But I have doubts. Life isn't a fairy tale.

Roger isn't a bad person. You can't say he deserves his misfortunes. A few bad choices early on, confounded by heredity, circumstances and a bad economy, and any one of us could be Roger.

I thought later that Roger was lucky to have a health care system available that could treat him. Then I wondered who was paying the bills.

Mike Buda is editor emeritus of Country Lines. Email Mike at mbuda@ countrylines.com or comment on his columns at countrylines.com/column/ ramblings











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888-991-1889



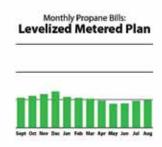


tecmi.coop



If you're tired of the ups and downs of your seasonal propane bills, now's the time to make a change. Thumb Energy Services Corporation is now offering **guaranteed pricing** on our Levelized Metered Propane Plan. Take charge of your energy budget with average monthly billing, convenient automatic bill payments, and the added security of our guaranteed pricing.





Call 989-658-8571 or 800-327-0166 today to sign up for the Levelized Metered Propane Plan!



989-658-8571 800-327-0166 tecmi.coop

Thumb Energy Services Corporation is not regulated by the Michigan Public Service Commission.