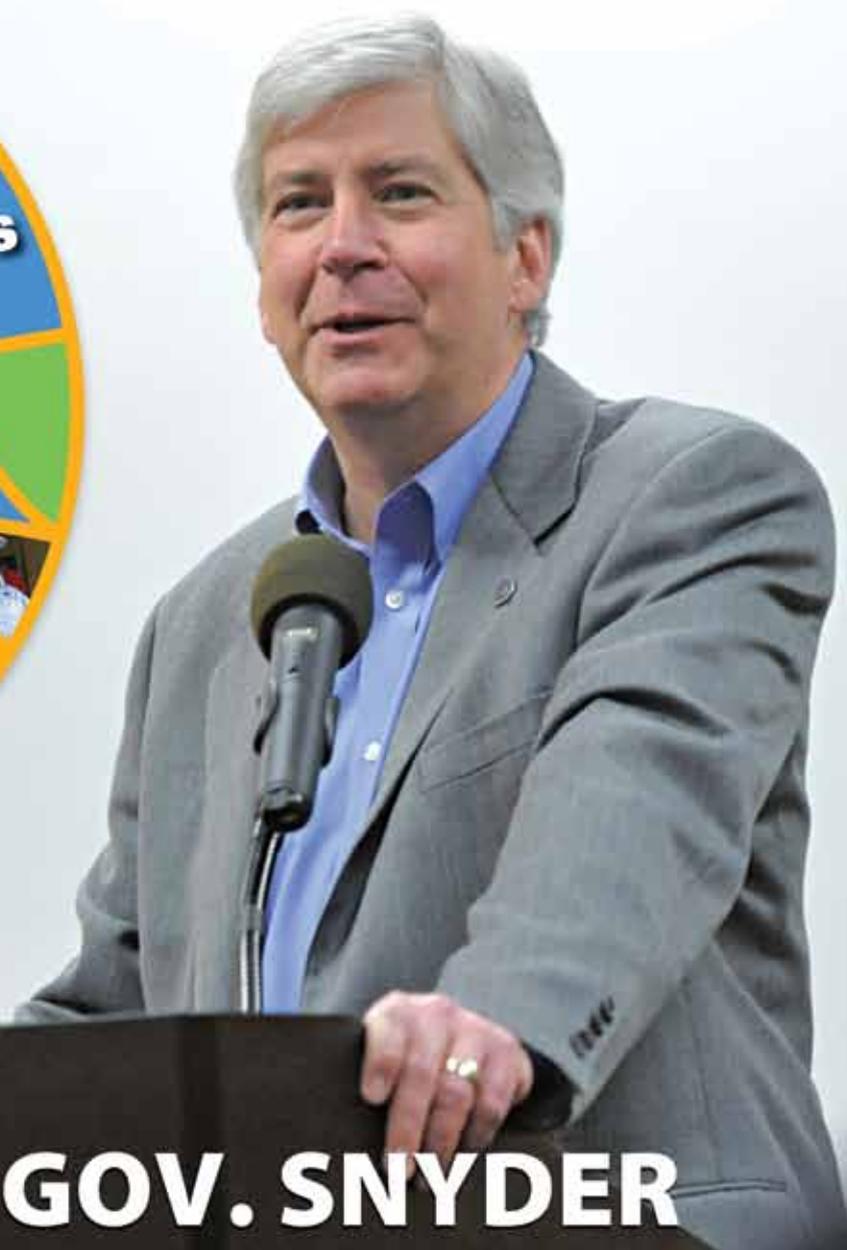
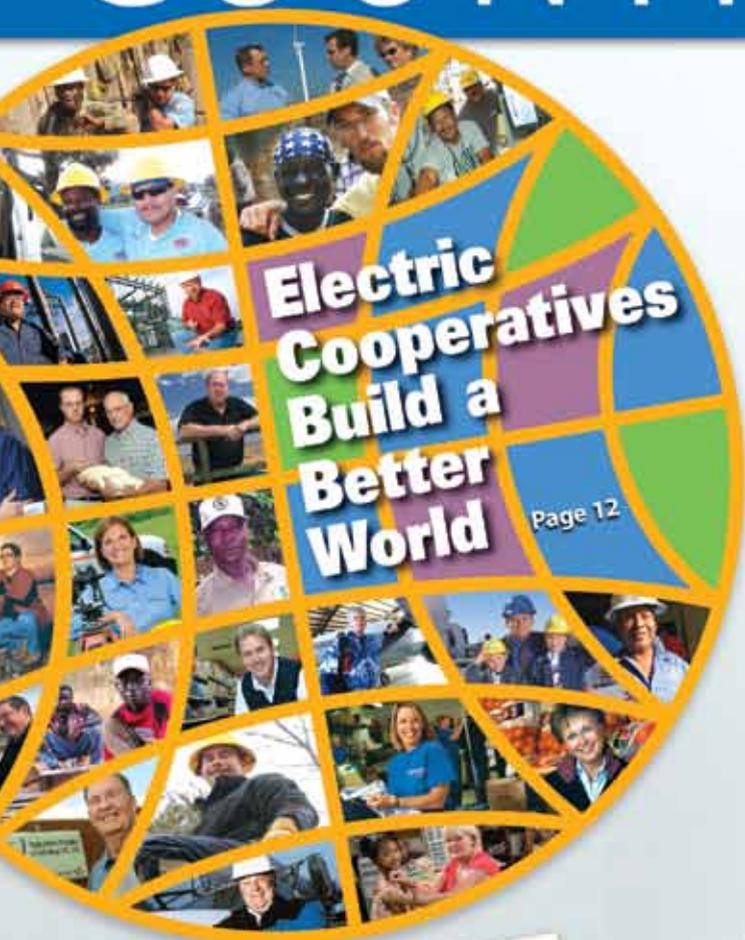


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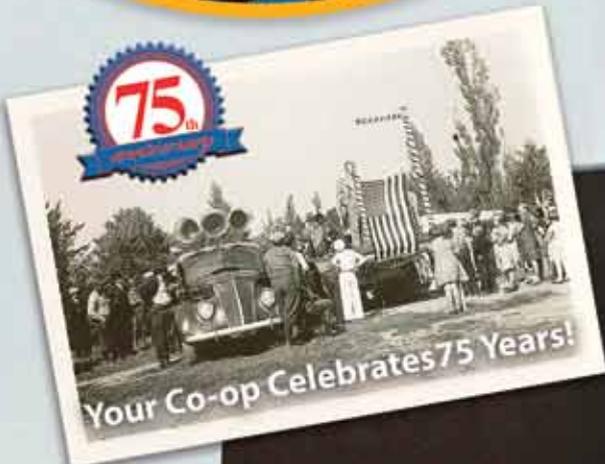
January/February 2012

Michigan

COUNTRY LINES



GOV. SNYDER
TALKS WITH **ELECTRIC CO-OPS**



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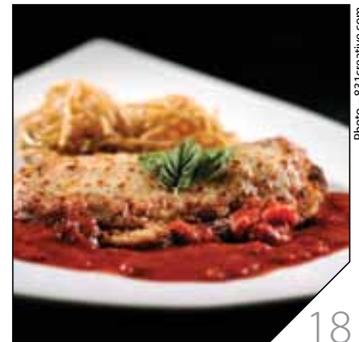
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The contributions electric co-ops make to building a better world will be highlighted during 2012 as the International Year of Cooperatives. Plus: Gov. Rick Snyder talks about his rural economic plans and electric co-ops.

Snyder Photo - Mike Quillanin

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PRESIDENT'S COLUMN

Electricity is Easy to Take for Granted

On Sept. 22, 1937, the first co-op electric pole in Michigan was set by Presque Isle Electric Cooperative—now Presque Isle Electric & Gas Co-op—near Posen. Incorporated on March 22, 1937, PIE&G energized the first Michigan co-op power line on Dec. 23, 1937, lighting 82 Presque Isle County farm homes in time for the holidays. (Raymond Kuhl, “On Their Own Power: The Story of Michigan’s Electric Co-ops,” pgs. 146-147.)

Try imagining life *without* electricity. Now, try life without electricity; no, really, *try it!* Go fetch the water; chop, pile and haul wood for a fire; light the kerosene lamps or candles; run out back to take care of business (you know what I mean); get the scrub board out to do a little laundry, etc. Work, work, work! (See related story, p. 20.)

Today, some PIE&G members don’t have to imagine life without electricity—they lived it. Before this modern marvel came to be, some went to great lengths (and great expense) to obtain it—with 32-volt generators and battery systems, “home lighting plants” that cost a small fortune, and wind-powered 6-volt DC generators to power radios. (Herman L. Miller, “Farming West of Atlanta, Michigan: The Way We Used to Do It,” self published, p. 53.)

You see, life *with* electricity is quite convenient, much less laborious, and much more productive and efficient. Many rural folks wanted the electricity those in the city took for granted. Say what you want, but nowadays, for about \$3/day, electricity is a pretty good deal for most of us...and way better than the alternative!

So, how did one small co-op make electricity so widely available, so quickly, throughout northeast Michigan—from Posen, to Lewiston, to Mackinaw City—building hundreds of miles of power lines? With much effort from field crews and linemen, financing (loans, not grants) from Washington, and much cooperation from neighbors who granted power line easement rights:

“Early electric lines were all set by hand.

The work days would start at first light of dawn, in whatever weather the day would bring. First, a path had to be cleared; so the men would cut trees and or brush with either a two-man hand saw or an axe. After the area



Brian J. Burns
President & CEO

was cleared, a hole had to be dug to set the pole in. This could be a challenge with only a shovel, a pick axe and a man or two to each hole. The most challenging place was in the swamps and the most challenging time was in the dead of winter, when the snow had to be shoveled before the frozen ground could be attacked by the pick axe. After the holes were ready, the men would

all work together to get the pole set in place and the hole filled back in. It is no wonder it took 10 years from the time the first poles were set in Posen until many in the Aloha area began to receive electricity.

The co-op extended lines into Cheboygan County by 1943, starting in the southwestern part and working its way northwest. By 1948, Aloha Township had electric lines



PIE&G's first manager, Albert Hall, signing up new members in 1937.

throughout the rural area farmland with the lines coming in from Onaway.” (Sharon Thompson Seabolt, “Aloha & Aloha Now and Then; The Roads and Utilities,” (The Aloha Historical Society, p. 5.)

The story is not a short one, and we hope to tell more of it throughout the year as we celebrate the first 75 years of your electric co-op. It would be interesting to know what happens during the second 75 years. I suspect a few of our younger members will be around to tell the story of how we kept the lights on.

PIE&G Rate Increase Necessary For Reliability

The Michigan Public Service Commission (MPSC) has approved new electric rates to allow Presque Isle Electric & Gas Co-op to continue its tree clearing and line replacement programs—thereby improving the reliability of electric service.

For residential members, the net effect on the average bill is an additional \$2.86 per month. The monthly residential member average is 634 kilowatt-hours. Please refer to the table for the new rates effective on December bills.

The new monthly availability charge (or “ready to serve” charge) reflects base costs the co-op incurs regardless of the amount of energy used. In other words, these costs are unrelated to how much electricity you use and are necessary to maintain the poles, wires and transformers that are in place to serve your residence. These base costs do not go up when you use more electricity or down when you use less electricity. Thus, it is necessary to recover these costs in order to ensure system reliability.

Your co-op is continuously challenged with striking the right balance between the need to raise rates, the impact to members, and the need to maintain reliable service.

Rate Impact	OLD	NEW	CHANGE TO AVG. BILL
MONTHLY RESIDENTIAL (at average use)			
Monthly Availability:	\$15	\$16	\$1
Energy @ 634 kWh:	\$51.42	\$52.28	\$1.86
		Total:	\$2.86/mo
SEASONAL RESIDENTIAL (at average use)			
Annual Availability:	\$192	\$204	\$12
Energy @ 2,209 kWh/yr:	\$261.88	\$277.25	\$15.37
		Total:	\$27.37/yr
OUTDOOR LIGHTING (per month)			
175 MV*	\$9.51	\$9.65	\$0.14
400 MV	\$16.86	\$17.16	\$0.30
100 HPS†	\$7.16	\$7.24	\$0.08
250 HPS	\$11.56	\$11.74	\$0.18

* (Mercury Vapor Lamp) † (High Pressure Sodium Lamp)

Residential Rate Comparison for MPSC-Regulated Electric Utilities

As of December 2011

MPSC-REGULATED ELECTRIC UTILITIES*	1,000 kWh Monthly Bill
Cloverland Electric Cooperative	\$115.32
Consumers Energy/CMS	\$118.96
Midwest Energy Cooperative	\$120.33
PIE&G	\$123.64
Great Lakes Energy (Cooperative)	\$127.83
Thumb Electric Cooperative	\$127.90
Alpena Power	\$133.83
Detroit Edison/DTE	\$143.67
Ontonagon County REA (Cooperative)	\$195.92

* This chart includes all MPSC regulated cooperatives in the State of Michigan and other Northeast Michigan utilities.
Source: Michigan Public Service Commission, dleg.state.mi.us/mpsc/electric/download/rates2.pdf



1937–2012

PIE&G Celebrates 75th Anniversary

In 2012, Presque Isle Electric & Gas Co-op and other electric cooperatives will celebrate 75 years of operation. To recognize this historic event, the United Nations proclaimed this year as the “International Year of the Cooperative” (see story, p. 12).

Presque Isle Electric & Gas Co-op will commemorate this achievement with special activities throughout the year that show appreciation to our members, including prize drawings, building tours, school visits and community events.

Plans are also underway to publish a book depicting our history and the men and women whose contributions helped bring electricity and natural gas service to residents of northeast Michigan. If you have a story, photo or other historical artifact we might use in this or other co-op publications, we'd like to hear from you. Please share your story by writing to: PIE&G, Attn: History, P.O. Box 308, Onaway, MI 49765. The deadline for submission is Feb. 1, 2012.

Your Board In Action

At their October and November 2011 regular meetings, the PIE&G Board of Directors:

- Recognized upon their retirement, April Peacock (40 years of service) and Dale Mix (39 years of service) for their loyal and dedicated service to the membership of the co-op.
- Accepted the 2012 Operating Plan/Budget as a reasonable forecast for the 2012 fiscal year and as a useful business planning tool for the co-op.
- Approved third quarter write-offs for bad debt owed the co-op in the amount of \$19,995.83.
- Reviewed plans for, and discussed results of, the Oct. 28 annual membership meeting.
- Approved new memberships from September and October, as presented.
- Accepted the team reports of CEO Burns and CFO Soback.
- Adopted “Policy 307, Rate Policy Statement – Energy Rate Design.”
- Approved the 2012 construction work plan of \$3,490,000 as a basis for utility plant project and budget planning and purchasing for the next fiscal year.
- Approved board committee assignments effective December 2011.



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 thorium-fueled "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.



Nov/Dec photo



Do you know where this is? ▶

Scholarships Offered

Each 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 thorium-fueled 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 ill-thought-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

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.



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 your name and town.



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



Youth Leadership Summit
INSPIRED BY Michigan's Electric Cooperatives

A Marathon for (Co-op) Managers

The weather was nasty—43 degrees with a steady rain and winds gusting up to 30 miles per hour—when Tony Anderson and Brian Burns began their 62-mile relay run on Oct. 15 from Gaylord to Mackinaw City.

The race was billed as the first “Top of Michigan” 100K race.

Anderson and Burns are avid runners, friends, and general managers at electric cooperatives—Anderson at Cherryland Electric Cooperative in Grawn and Burns at Presque Isle Electric & Gas in Onaway.

They split the run, taking turns winding their way through Vanderbilt, Wolverine, Indian River, Cheboygan and finally to Mackinaw City. It took them a combined 9 hours, 56 minutes and gave them a first place finish among the four two-man teams that took part. There were also six-person teams and individuals.

“I think it rained eight or nine hours of the nearly 10 hours we were on the course,” said the 49-year-old Anderson, who has completed 21 marathons in 20 states. “Luckily, the course was flat and we ran mostly on crushed limestone, which was very forgiving on my bad ankle.”

A month earlier, Anderson had fractured his ankle while doing a marathon in Delaware, but he ran through the pain and completed it anyway.

Running the Gaylord to Mackinaw City marathon—he covered 32.5 miles—was the furthest he’d run in one day. Likewise for Burns, who mentioned the marathon to Anderson back in July.

“But I was not interested at all in running it,” said the 53-year-old Burns, who competed in track and cross-country in high school. “I guess Tony talked me into it. I reluctantly agreed as a way to motivate myself to get into better shape. I had eight weeks to get ready. I looked forward to it from the standpoint that if it didn’t kill me it would make me stronger.”



Friends and fellow electric co-op managers, Brian Burns (L) and Tony Anderson catch their breath after finishing their 62-mile trek from Gaylord to Mackinaw City.

Burns is no stranger to running marathons—he has completed five himself.

“I’m not sure this ultra marathon we ran to Mackinaw City qualifies as a marathon because we had a couple of breaks while the other guy was running,” said Burns. “But all-in-all, it was challenging and it was fun. I’m glad we did it.”

After each leg, Anderson and Burns changed into dry shirts and socks. They also had help from Tony’s wife Mary, who drove a support vehicle, stocked with food and water. Burns also acknowledged the assistance of his wife Pam. “She joined us at the midway point of the race and shuttled me on a couple of legs,” he said. “I couldn’t have done this without her.”

“The last 16.5 miles from Cheboygan to Mackinaw City was a bit tough,” said Anderson. “I was tired and a little underprepared due to the ankle injury. But even though we didn’t see many people along the route, the organization of the

race was excellent. There were aid stations along the way, and friendly volunteers. It also helped that Mary was there to greet us every few miles. Overall, it was a great time.”

Each co-op general manager has his unique training regimen.

Burns does a lot of cross-training, where he combines weight lifting with running three to four times a week for up to 20 miles. Anderson runs anywhere from 25-45 miles a week and also combines cross-training techniques like weight training and yoga.

Still, all their training hadn’t prepared them for a lengthy 62-mile race run under grueling conditions.

“When I crossed the finish line, I gave Brian a high-five and said ‘never again,’ Anderson said with a laugh. “Less than two hours later, I was thinking this was a great race and I could certainly do it again.”

— Nick Edson

Surviving an Outage

The cold temperatures, ice and snow associated with winter weather make staying warm and safe a challenge—especially if the power goes out. Create a winter survival kit for your home to help you and your family survive the cold winter.

The Essentials:

Keep three to seven days worth of emergency supplies. These typically include:

Food – pick items that require no cooking or refrigeration such as bread, crackers, cereal, canned foods and dried fruits. Remember baby food and formula if needed.

Water – In case water pipes freeze or rupture, keep a supply of tap water or purchase bottled water. The recommended amount of water to keep on hand is 5 gallons per person.

Medicines – Roads may be inaccessible for several days due to a winter storm. Make sure you have an appropriate amount of

over-the-counter and prescription medicine that family members may need or regularly use. If you or someone in your family uses oxygen, make sure you have extra available.

Identification – Keep forms of identification with you such as a social security card, passport, photo ID and driver's license. In addition, make sure to have bank account and insurance policy information handy.

Alternate Heat:

Alternate methods may include:

- Dry firewood for a fireplace or wood stove
- Kerosene for a kerosene heater
- Furnace fuel (coal, propane, or oil)
- Electric space heater with automatic shut-off switch and non-glowing elements

Other Items:

Other items you should have on hand are:

- Blankets
- Multipurpose, dry-chemical fire extinguisher
- Flashlight and matches
- First Aid Kit and instruction manual
- Battery-powered radio

- Clock or watch
- Extra batteries
- Shovel
- Rock salt
- Nonelectric can opener



When creating a winter survival kit for your home, take into consideration factors that are specific to your home and family. For instance, if your home is isolated or on the outskirts of a residential area that may be difficult for emergency responders to locate, place something highly noticeable and unique at the end of your driveway or lane.

Listening to weather forecasts and keeping abreast of the latest developments can provide you with several days notice to check emergency materials and stock-up on essential supplies.

If you have a generator, keep an appropriate supply of fuel on hand. Make sure the fuel is accessible and stored safely. *Never run a generator in your basement or garage.* Unless you have a transfer switch—sometimes called a safety switch—it is best to plug individual appliances directly into the generator. *Do not try to connect the generator to your main panel.*

Stay Clear!

A downed power line may not be a dead line. It could cause serious injury or death.

Follow these tips to stay safe:

- ▶ **Assume all power lines are energized and dangerous.** Even lines that are de-energized could become energized at any time.
- ▶ **Never touch a downed power line!** And never touch a person or object that is touching a power line.
- ▶ **If someone is injured as a result of contact with electric current, do not try to assist him or her.** You could be injured or killed. Call 911.
- ▶ **If a power line falls across your vehicle while you are in it, stay inside until help arrives.**
- ▶ **Call 911 immediately to report a downed power line.** Then call your electric cooperative.

Scholarships Available

Each year the PIE&G Communities FirstFund awards up to three scholarships for graduating high school seniors who plan to attend Alpena Community College, Kirtland Community College, or North Central Michigan College, and who are dependents of a PIE&G member.

Applications are available online at pieg.com or by calling 800-423-6634, ext. 813. The deadline for completed applications is **March 31, 2012.**

Notice to Members of Presque Isle Electric & Gas Co-op Case No. U-15820 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, Presque Isle Electric & Gas Co-op submits an annual report to the MPSC regarding its Renewable Energy Plan. In 2010, Wolverine Power Cooperative, Inc., Presque Isle's wholesale power supplier, generated 143,821 megawatt hours (MWh) of renewable electricity from its Harvest Wind Farm and Thunder Bay Hydro. Of that, 116,470 MWh of renewable energy were banked on behalf of Wolverine's distribution co-op members, including Presque Isle. Wolverine will continue to generate renewable energy and bank unused renewable energy credits (RECs) for future use and compliance with statutory renewable portfolio standard requirements on behalf of its members.

Energy Plan annual report that was filed with the MPSC is available on the cooperative's website at pieg.com or by request at the cooperative's office.

Educating the Next Generation of Community Leaders

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

Each 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 touchstoneenergy.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.”

“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).



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.

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

“The 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 meeting.

“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 commercially-important 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



Photo—Mike Quillanin

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.”

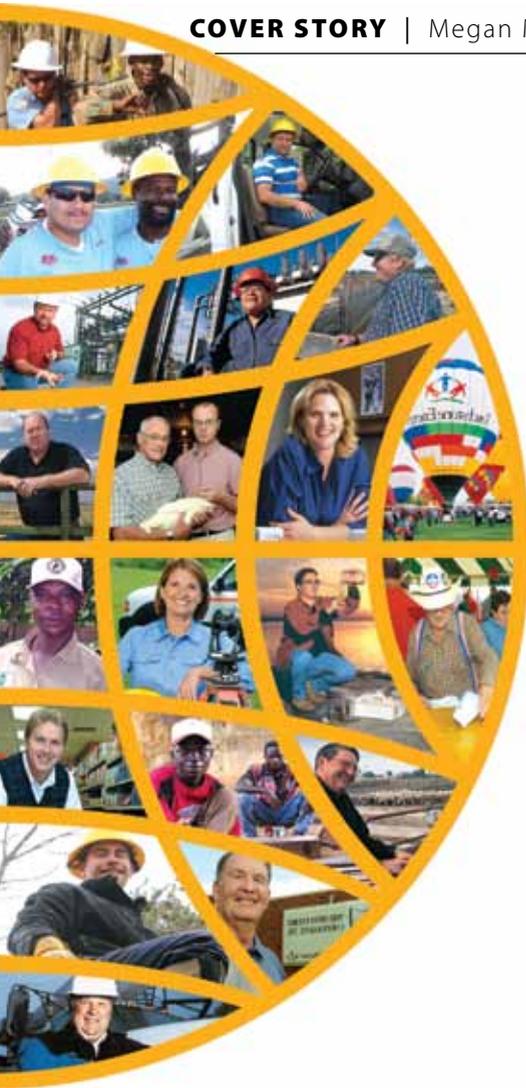
In regard to electric power generation, Snyder said he supports exploring both the producer and consumer sides of electricity—especially on generation fueled by natural gas. He expressed concern about long-term power supply prices.

“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.

Is 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, consumer-owned 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 consumers.

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 manner.

- 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 for-profit, 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 co-ops 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 remains.

“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 group 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.

Electric 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 TogetherWeSave.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 farmer-owned 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 distribution co-ops work together to sponsor youth programs for their members’ teens from all over the state. For nearly 30 years, these co-ops 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

Busy 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 low-sugar 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



Photos - Simone Scarpace

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 weebiejammin.com or call 231-510-9500.

retailers, and cities such as Atlanta, Chicago and New York City. They have an internet store at weebiejammin.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 Beesies!"

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 must-have 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



Photo: iStockphoto.com

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:

AGE	CHILD:STAFF	MAX. GROUP SIZE
Birth-24 mos.	3:1	6
25-30 mos.	4:1	8
31-35 mos.	5:1	10
3 yrs.	7:1	14
4-5 yrs.	8:1	16

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 in-home 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 goodbye.

The Nature of Things

For nature writer Jerry Dennis, curiosity is the drive.

“Curiosity killed the cat,” as the old 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*, *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 surgery—and 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.

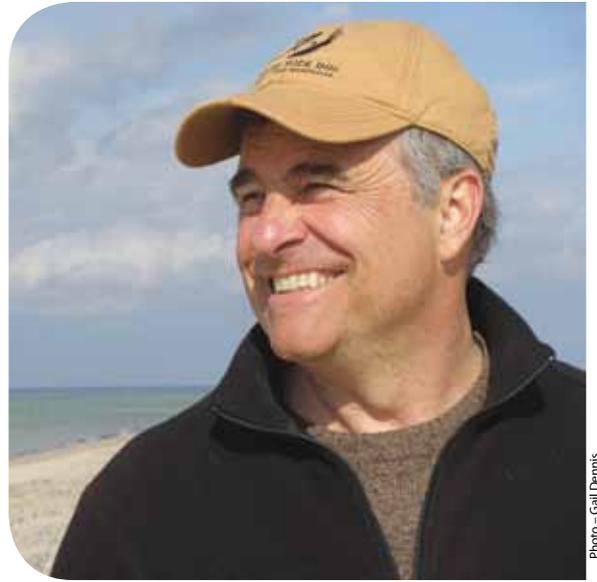
“I was determined to get on one of those boats to know what it was like to be in that race, even though I’m not a sailor. I naively went down to the Chicago Yacht Club before the race and asked for a spot on a boat. Of course nobody wanted a greenhorn so I had a heck of a time getting on; but luckily, a half-hour 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-year-old 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.



Photo—Gail Dennis

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 award-winning outdoors writer that submits regularly for Country Lines.





Photos - 831creative.com

MEALS UNDER \$10

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 years and friends have suggested that I start a blog so they could find my recipes. So a year ago, I did just that. It's busychickrecipes.com. In it, I create original, 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 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 cheese, if desired.

Red Beans & Rice with Sausage

1 c. beef broth or bouillon
1/3 c. diced celery
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

1-1/2 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.

Turkey Chili



Silent Sentinels

Electric co-op poles remain the key to safe, reliable, affordable power.

The path of power to your home is guarded by silent sentinels—utility poles—that are under constant attack by Mother Nature and, sometimes, by people.

“About 38,832 miles of line, supported by utility poles, keeps power flowing across Michigan,” explains Joe McElroy, loss control specialist and safety consultant for the Michigan Electric Cooperative Association.

Nationwide, electric co-ops own and maintain 2.5 million miles of line stretching across three-quarters of the U.S. landmass. Some lines are buried, but over 2 million miles of line are above ground. Since there are generally 18 wood poles for every mile of distribution line, electric co-ops rely on more than 37 million poles to safely and reliably deliver affordable power to your home.

Pole Patterns

Utility poles take several forms: concrete, steel, ductile iron, composite fiberglass, and—overwhelmingly—wood. Why do utilities prefer treated timber?

Tried-and-true wood poles are more affordable—steel and composite fiberglass poles often cost at least twice as much, although these alternatives claim a longer lifespan (most have not been in service long enough to verify the claims). Combined with a proven service life that can span several decades, treated wood poles provide the most affordable choice for most electric co-ops.

“Generally, utilities turn to alternative poles when nothing else will work,” explains McElroy. “If you’ve got a woodpecker problem, wood simply won’t cut it. Utilities in storm-saturated parts of the country may

turn to underground lines, but more often than not these utilities opt to ‘harden’ their lines by installing larger wood poles and shortening the span between poles to help the system weather storms more successfully.”

For utilities battling copper crime, ductile iron poles offer an interesting option—they eliminate the need for copper grounding wires running up the side of a pole. But these poles aren’t as easy to climb in a pinch, and could pose a problem if not easily accessible by bucket truck.

“Co-ops expect poles are going to last at least 40 years in the field, barring unpreventable storm damage and other accidents,” stresses Jim Carter, executive vice president of Wood Quality Control, Inc. (WQC), a subsidiary of the National Rural Electric Cooperative Association. Carter estimates

that co-ops are responsible for between one-quarter and one-third of the nation’s annual wood pole production.

Each year, electric co-ops spend roughly \$300 million to purchase close to 1 million wood poles and 2 million crossarms—amounting to a whopping 20 percent to 33 percent of a co-op’s annual materials budget. Created in 1982, WQC works closely with manufacturers and co-ops to monitor pole construction conditions and make sure co-ops invest in high-quality poles that meet strict federal Rural Utilities Service (RUS) standards.

Double Duty

Not only do poles support the nation’s power system; telecommunication companies often rent space on poles to attach



Photo Courtesy - National Archives



Photo - Wendy Malaska

Left: Raising utility poles before 1935 was a primitive task, but soon the Rural Electrification Administration developed assembly line methods and standardized electrical hardware that lowered costs and made rural electrification more feasible. **Right:** A Cloverland Electric Cooperative (Dafer, MI) crew shows how power equipment is used today to help raise utility poles.

telephone and cable wires.

Each pole, averaging a height of 40 feet, breaks down into three zones. The supply space, which shuttles electricity from generation plants and substations to homes and businesses, can be found at the top of every pole. In most cases, a crossarm—a beam fixed horizontally across the top—divides the supply space from the middle ‘neutral’ space, called a safe zone. The safe zone forms a barrier between lines carrying high-voltage electricity and the area rented to other utilities, known as the communications space.

Hazardous Mission

Affordable wood poles stand the test of time—each pole’s lifespan ranges from 30 to 50 years, and in the right conditions can last much longer. To lengthen a pole’s life, wood is pressure-treated with preservatives. But no matter how strong a pole may be, both nature and people threaten a pole’s ability to serve.

Wood poles battle a wide array of adversaries: acidic soil in the Midwest, heavy moisture in the South, and woodpeckers in the Mid-Atlantic. Utilities generally inspect poles on a 10- to 12-year cycle to identify potential problems.

Poles age differently depending on region, so RUS divided the nation into five decay zones. Poles in Zone 1—Idaho, Montana, Wyoming, Utah, Nevada, Colorado, Arizona, New Mexico, and portions of Alaska, Nebraska, South Dakota, Kansas, Oklahoma, and Texas—face the lowest risk of decay, while Zone 5 poles in Louisiana, Florida, Hawaii, and the coastal regions of Alabama, Mississippi, Georgia, South Carolina and Virginia sustain the highest risk. Utilities generally replace 2 to 3 percent of aging and decaying poles every year.

Natural decay, storm damage, and bird and bug attacks aren’t the only concerns. People shorten a pole’s lifespan, too.

The National American Wood Council estimates 5 percent of poles replaced annually were broken by car accidents. Attaching signs, basketball hoops, clothes lines, birdhouses, satellite dishes, or other items to wood poles with staples or nails can also shorten a pole’s lifespan. Not only do these items create safety hazards when lineworkers need to climb a pole; even small holes speed a pole’s decay.

Strong poles deliver reliable power.

Sources: NRECA, Wood Quality Control, Inc., American Wood Protection Association, Western Wood Preservers Institute

Why Keep Power Lines In Harm’s Way?

High winds and ice can cause tree limbs to fall on power lines and trigger outages. And while your electric co-op’s lineworkers are on-call 24/7 and respond quickly to problems, some folks ask the question: “Why keep power lines in harm’s way?”

There are two ways electricity can be delivered to a home: through overhead or underground power lines. Underground lines may seem preferable since the lines are not exposed to extreme weather, but the technology doesn’t always make sense for electric co-ops focused on affordability.

In Michigan, the cost of installing power lines underground is 50 to 60 percent higher than overhead lines, says Scot Szymoniak, manager of operations and engineering for PIE&G. Overhead installation costs can range from \$40,000-\$90,000 per mile of line, and from \$70,000 to \$150,000 per mile for underground lines, he says.

By comparison, in Iowa, underground lines average \$85,000 to \$100,000 per mile, while overhead line construction runs about \$60,000 per mile. In Georgia, in mountainous or rocky areas, where lineworkers sometimes use dynamite to install utility poles, the price tag may be even higher.



Photos - iStockphoto.com

Most underground lines nationally are found in subdivisions where developers pay for the option for aesthetic reasons or to comply with local statutes. A high concentration of homes in these areas helps spread out the expense. According to Hi-Line Engineering, a Georgia-based utility consulting firm, nine out of 10 new subdivisions are served by underground cable.

But the bulk of co-op energy (including that provided to subdivisions) continues to be delivered through overhead lines—only 16 percent of the 2.5 million miles of distribution lines owned by electric co-ops nationwide are found underground (although the amount grows by about 1 percent annually). Co-ops are nonprofit, selecting methods that keep electricity affordable and reliable for consumers.

There are pros and cons to both forms of power distribution. Underground facilities are more reliable during storms and generally require less right-of-way maintenance because there are no trees, brush and other vegetation to clear away.

However, faults in underground power lines are not easy to track and fix. A North Carolina study found that outage restoration times averaged 92 minutes for overhead versus 145 minutes for underground lines. In 2005, Hi-Line Engineering compared the larger cost of underground lines against their benefits in Virginia, and found that underground savings did not outweigh the heavy installation cost. In Michigan, Szymoniak says underground outage restoration can take significantly longer—four to five times, but there are not as many outages, either.

“If a tree falls on a line, you can normally drive down the line, see the problem, and get to work restoring power,” adds Szymoniak. The same holds for fixing broken insulators and crossarms—if you see it, you can fix it, but experts agree that underground lines are tough to troubleshoot. If you can’t find the problem with your eyes, you have to search harder—tracking it down based on where the power flow stops. Then, a line crew has to dig a hole to reach the spot before repairs can be made.

For most co-op consumers, affordable overhead lines will remain the norm, at least for now.

Midwest Energy Cooperative Joins Wolverine

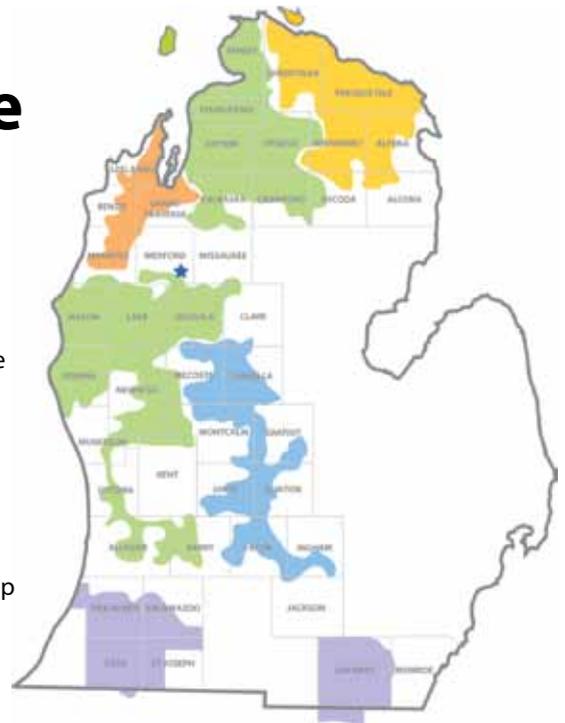
Midwest Energy Cooperative became the seventh member of the Wolverine Power Cooperative family this past November. The boards of directors of Midwest and Wolverine approved Midwest's membership agreement, and regulatory approvals have been obtained.

As with Wolverine's existing electric distribution co-op members—Cherryland Electric, Great Lakes Energy, HomeWorks Tri-County Electric and Presque Isle Electric & Gas Co-op—Midwest is receiving power supply from Wolverine under a contract extending through the year 2050. Midwest also has two seats on the Wolverine board of directors, as do all Wolverine members.

"We are looking forward to a long-term relationship with the Midwest board and staff, and the cooperative's nearly 40,000 customers," says Eric Baker, president and CEO of Wolverine. "Serving a larger membership with the addition of Midwest will allow Wolverine broader access to new generation sources and opportunities while minimizing rate impacts to all co-op members."

Midwest serves southern counties in the

- Cherryland Electric Cooperative
- Great Lakes Energy
- HomeWorks Tri-County Electric Cooperative
- Midwest Energy Cooperative
- Presque Isle Electric & Gas Co-op
- ★ Wolverine Power Cooperative



Lower Peninsula, including Van Buren, Kalamazoo, Cass and St. Joseph. The cooperative's service area also includes the majority of Lenawee County and extends into Monroe County, Ohio and Indiana. Midwest has just over 80 employees reporting to offices in Cassopolis, Adrian and Paw Paw.

With the addition of Midwest, Wolverine now serves six of the seven electric cooperatives located in the Lower Peninsula.

"Sales to Midwest will account for a nearly

25 percent increase in our total sales," Baker says. "Additionally, our existing distribution members continue to experience growth, setting several new energy records in 2011."

Wolverine's Energy Control Center recorded three new records for Cherryland, Great Lakes, HomeWorks and Presque Isle in 2011, including a new all-time peak of 515 megawatts (MW) for the combined electric loads of these cooperatives, surpassing the previous all-time peak of 490 MW set in August 2007.

WCEV Update

Wolverine Prepping to Seek Bids for Power Plant Components

Wolverine Power Cooperative continues to prepare formal bid packages for key components of the Wolverine Clean Energy Venture (WCEV) power plant project, including boilers, turbines and foundations. The cooperative expects to begin seeking bids from potential vendors early this year.

"We have seen great interest in the project from several of the industry's leading construction firms since the Michigan Department of Environmental Quality approved the final air quality permit in June 2011," says Dan DeCoeur, vice president of power supply for Wolverine.

Companies interested in working with Wolverine on the proposed power plant are



A rendering of the proposed Wolverine Clean Energy Venture power plant.

encouraged to provide contact information on the cooperative's website for the project at wolverinecleanenergy.com.

Under state and federal law, Wolverine has 18 months from the date the final air permit was issued to begin work at the project site. If a decision is made to proceed with the

project, fall 2012 is the earliest construction would begin.

The air quality permit allows for construction of two circulating fluidized bed units, each capable of generating 300 megawatts of electricity using a fuel mix of coal, petroleum coke and biomass.

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.

It 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 year-round 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

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

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



NEW! Programs to Help Control Your Electric Use

This 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 pro-

grams 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

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.

Presque Isle Electric & Gas Co-op will offer:

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

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.

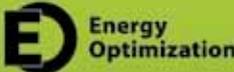
You must be a Michigan resident and electric co-op member to be eligible for these programs. Other restrictions may apply. Visit michigan-energy.org for a complete list of participating utilities.



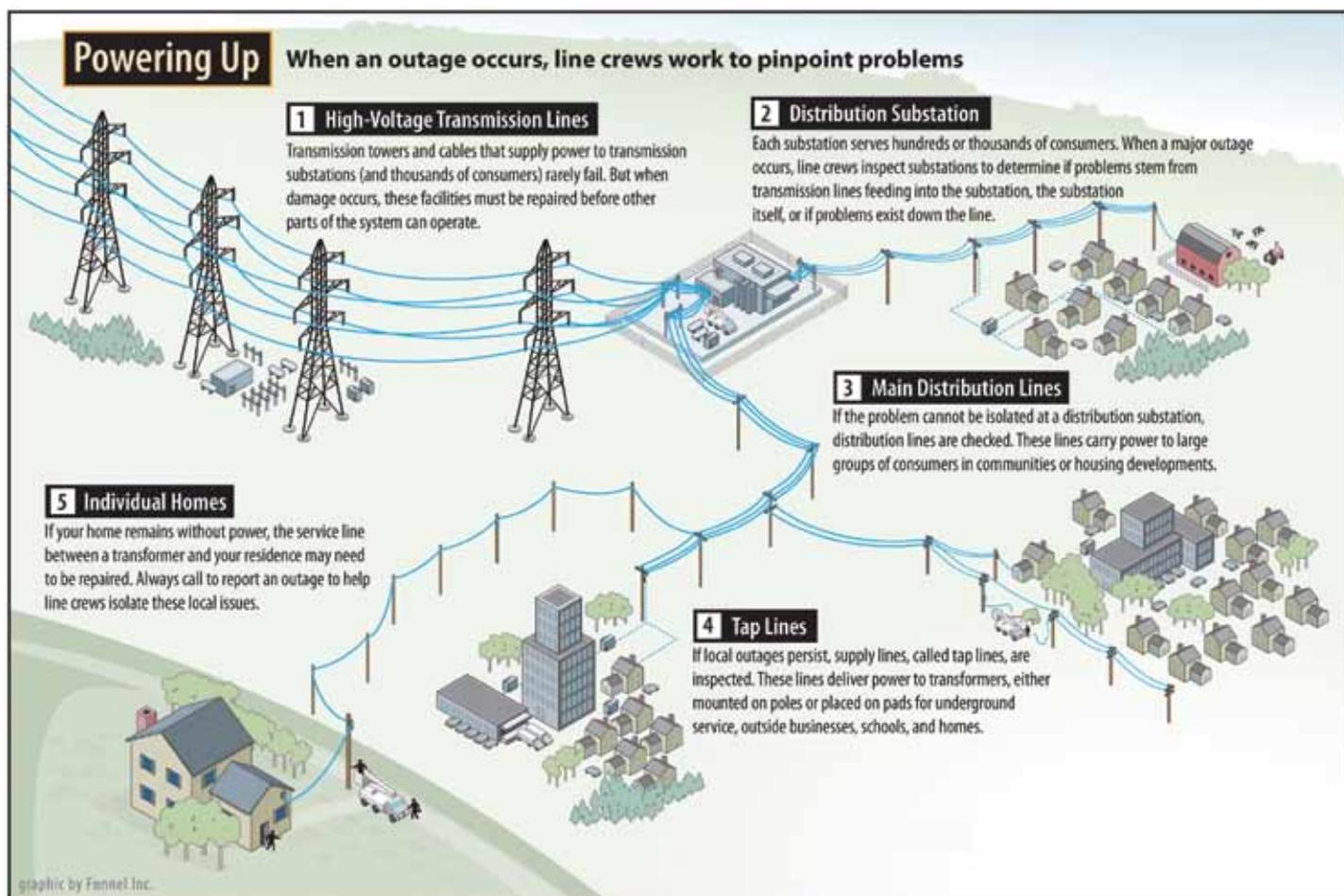
Better ways to manage your electric use.
New year. New opportunities. Watch for new and improved energy saving programs in 2012. From income specific home weatherization to rebates on appliances, you'll love the rebates and incentives coming your way.

something NEW

LEARN MORE
Online: michigan-energy.org Phone: 877.296.4319

Energy Optimization programs and incentives are applicable to Michigan service locations only. Other restrictions may apply. For a complete list of participating utilities, visit michigan-energy.org.



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. ▲

When Will I Get My Power Back?

Ever wonder how Presque Esle Electric & Gas Co-op decides where to start restoring power after an outage? When your co-op's staff begins assessing storm damage, they focus on fixing the biggest problems first, prioritizing repairs according to how quickly and safely they can get the most homes back into service.

Step One: Clearing the Path

Think of the flow of electricity as a river in reverse. It originates at a single ocean of power (a generation plant) and diverges from there into a series of transmission lines, substations and smaller feeder lines until it reaches homes and businesses at a trickle of its original strength.

Transmission lines, which carry power at high voltages from power plants, and local substations, where the voltage is lowered for

Plan ahead! If you or a family member depends on special medical equipment, be sure you have a backup plan or arrangements in place with a family member or neighbor before an emergency arises.

safe travel to neighborhoods, must both be inspected for damage and repaired before any other restoration efforts take place. After all, if the substation linked to your neighborhood's power supply is damaged, it doesn't matter if lineworkers repair every problem near your home—the lights will stay dark.

Step Two: Bulk Efforts

After restoring the flow of power to local substations, co-ops focus on getting power back to the greatest number of members. Distribution lines in more populated cities

and communities are checked for damage and repaired quickly, delivering electricity to most members.

What does this mean? You may live on a farm with neighbors a mile or two away, or you may live in a neighborhood surrounded by 20 homes. Folks in neighborhoods will likely see power return before those in remote areas. Line repairs are once again prioritized by the number of members who benefit.

Step Three: One-on-One

After fixing damage that blocks power from large pockets of members, your co-op focuses on repairing tap lines (also called supply or service lines). These lines deliver power to transformers outside homes and businesses. This is the final stage of power restoration, requiring a bit more patience.

A Life of Curveballs

Life 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

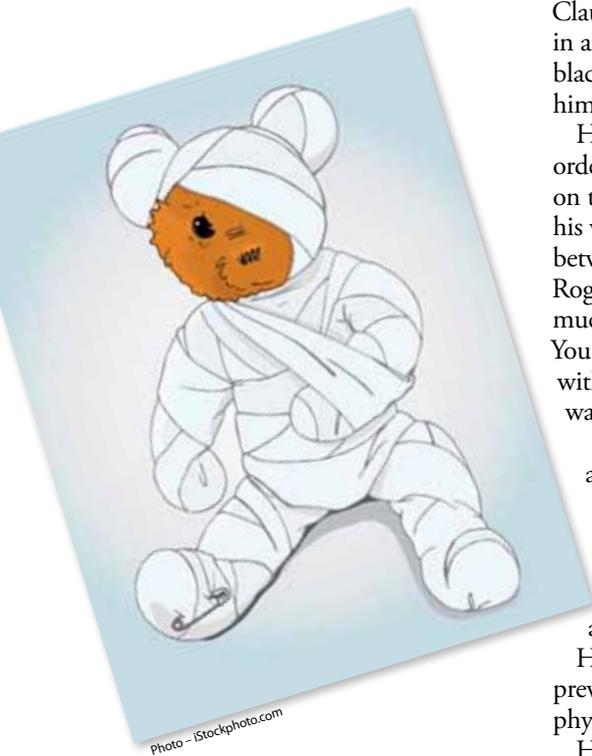


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