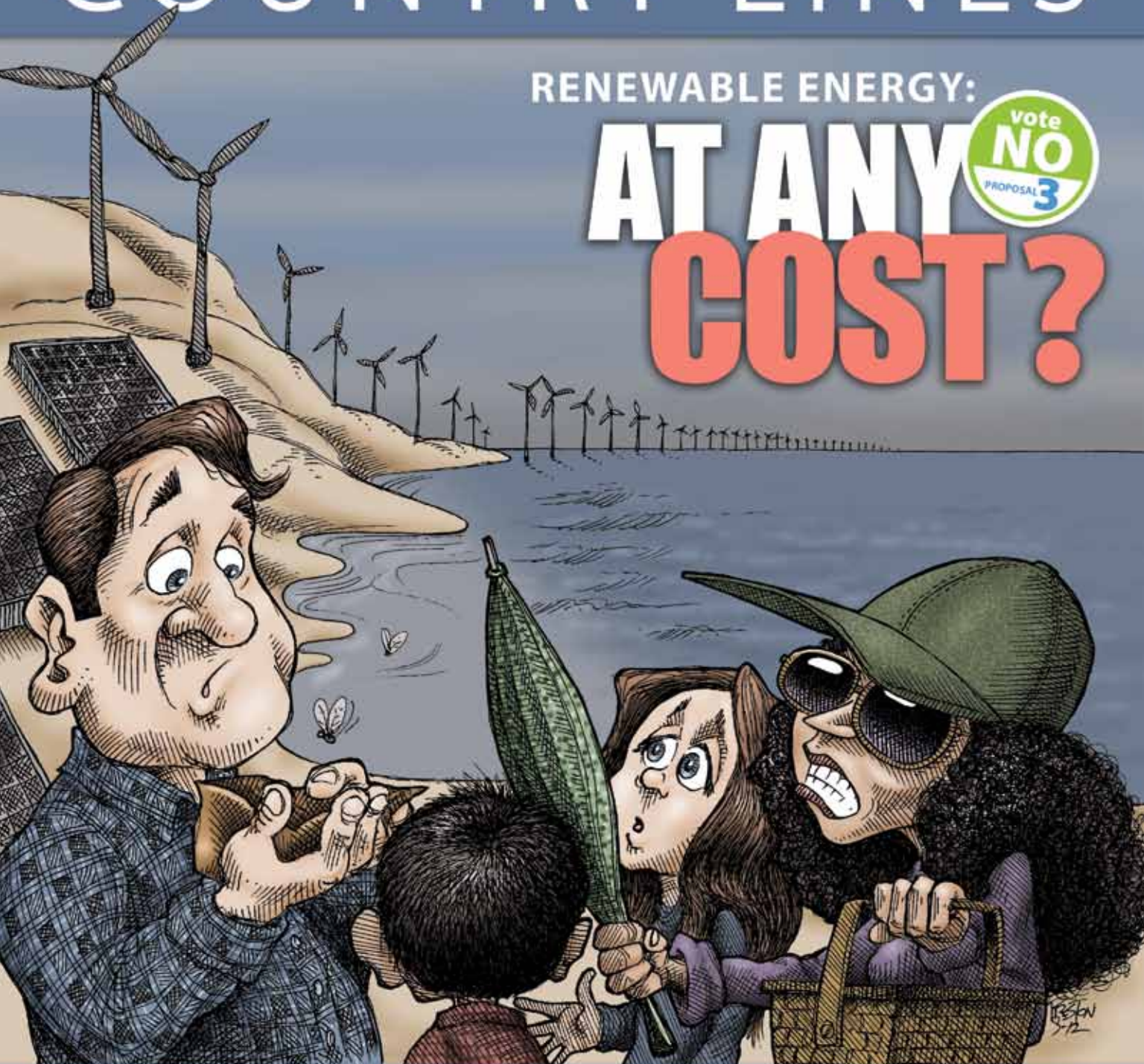


Michigan

COUNTRY LINES

RENEWABLE ENERGY:

AT ANY
COST?



4 Standing United
Against Prop. 3

8 Maple Moon
Family Sugary

24 Stay Safe
And Warm

Hurry, this event ends on
NOVEMBER 30, 2012!

Some choices are clear.

WaterFurnace Geothermal

- Even, luxurious comfort
- Savings up to 70% on bills
- Uses the clean, renewable energy in your backyard
- Provides heating, cooling & hot water
- 25 year system life¹

Fossil Fuel Furnace

- Hot to cold swings
- Volatile fossil fuel prices
- Relies on the combustion of fossil fuels
- Provides heating, heating & more heating
- 15 year system life



Life is full of difficult choices, but choosing a WaterFurnace geothermal heat pump isn't one of them. WaterFurnace can save you up to 70% on heating, cooling & hot water by capturing the clean, renewable energy in your backyard. Plus, for a limited time, we're offering **instant rebates** or **0% financing** on any of three geothermal packages. Each is tailored to fit your needs - so every choice is perfect. And with an additional **30% federal tax credit**, there's never been a better time to choose WaterFurnace. Visit your local WaterFurnace dealer for more information.

\$2,500 or **0%**
Instant Rebate 12 Mo same as cash²

Includes 5 Series dual capacity 500A11 & Envision NSW with GeoTank, color touch-screen thermostat, IntelliStart, AXB controls & installation accessories.

\$1,500 or **0%**
Instant Rebate 12 Mo same as cash²

Includes 5 Series dual capacity 500A11 with color touch-screen thermostat, IntelliStart, AXB controls & installation accessories.

\$1,000 or **0%**
Instant Rebate 12 Mo same as cash²

For replacement of existing geothermal systems. Includes 5 Series dual capacity 500A11 with IntelliStart & AXB controls.

The
Perfect Choice
Savings Event

Your Local WaterFurnace Dealers

Bad Axe

B & D Heating
(989) 269-5280

Berrien Springs

WaterFurnace Michiana
(269) 473-5667

Big Rapids

Stratz Heating & Cooling
(231) 796-3717

Caro

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

Carsonville

Certified Temperature Innovations
(810) 300-7748

Charlotte

Applegate Home Comfort
(517) 541-8013

Cheboygan

Jim's Handyman
(231) 627-7533

Clifford

Orton Refrigeration & Htg
(989) 761-7691

DeWitt

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

Gaylord

Family Htg & Clg
(989) 732-8099

Grand Rapids

Montgomery Htg & Clg
(616) 459-0261

Total Comfort Resource, LLC
(616) 406-3182

Hart

Adams Htg & Clg
(231) 873-2665

Ionia

Home Experts
(800) 457-4554

Kalkaska

Kalkaska Plumbing & Htg
(231) 258-3588

Lapeer

Porter & Heckman
(800) 445-4328

Michigan Center

Comfort 1 Heating/
Lenawee Heating
(517) 764-1500

Mount Pleasant

Walton's Htg & Clg
(989) 772-4822

Muskegon

Geofurnace Htg & Clg
(800) 922-3045

Onaway

Standard Heating
(989) 733-8309

Palms

Lakeshore Improvements
(989) 864-3833

Traverse City

Geofurnace Htg & Clg
(231) 943-1000

D&W Mechanical

(231) 941-1215

Webberville

Applegate Home Comfort
(800) 377-2272



waterfurnace.com/PerfectChoice

¹According to ASHRAE estimate.

²Loans provided by EnerBank USA (1245 E. Brickyard Rd. Suite 640, Salt Lake City, UT 84106) on approved credit, for a limited time. Repayment terms vary from 12 to 132 months. Interest waived if repaid in 365 days. 16.85% fixed APR, effective as of 8/01/2012, subject to change. Rebate available only to residential customers through participating dealers. WaterFurnace is a registered trademark of WaterFurnace International, Inc.

Editor
Gail Knudtson

Associate Editor
Doug Snitgen

Design Editor
Cindy Zuker

Publisher
Craig Borr



DEPARTMENTS

6 Readers' Pages
Letters, mystery photo,
utility scams

18 Home Cooking
Take-along dishes
*Christin McKamey &
Our readers*

22 Wolverine Power*
Some Wolverine history
Nancy Tanner

COLUMNS

11 Comment
Prop. 3 is a power grab
Frank Kelley

16 Family
Top gifts for kids
Linda Wacyk

17 Outdoors
Bamboo fly-rod maker
Bob Gwizdz

22 Gardening*
Shrubs
Neil Moran

23 House & Home
Soundproof walls
James Dulley

26 Ramblings
Promises, promises
Mike Buda

FEATURES

10 Our Energy
Understanding window
energy efficiency claims
Megan McKoy-Noe

12 Cover Story
Renewable energy:
At any cost?
Doug Snitgen

14 Winter Wise
Home heating
assistance programs

15 Michigan-Made
The craft lady of Caro
Kath Usitalo

Michigan Country Lines, USPS-591-710, is published monthly, except August and December, with periodicals postage paid at Okemos, MI, and additional offices. It is the official publication of the Michigan Electric Cooperative Association, 2859 W. Jolly Rd., Okemos, MI 48864.

Subscriptions are authorized for members of Alger Delta, Cherryland, Cloverland, Great Lakes, HomeWorks Tri-County, Midwest Energy, Ontonagon, Presque Isle, and Thumb electric cooperatives by their boards of directors. Subscriptions for nonmembers are \$6 per year.

POSTMASTER: SEND ALL UAA TO CFS.

Letters to the editor should be sent to Country Lines, 2859 W. Jolly Rd., Okemos, MI 48864. Phone 517-913-3531. Email: gknudtson@meca.coop.

Association officers are **Tony Anderson**, Cherryland, chairman; **Ken Swope**, Midwest Energy, 1st vice chairman; **Robert Schallip**, Cloverland, 2nd vice chairman; **Eric Baker**, Wolverine Power, secretary-treasurer; and **Brian Burns**, PIE&G, past chairman. **Craig Borr** is president and CEO.

Unsolicited letters, photos and manuscripts are welcome. *Country Lines*, however, will not be responsible for their safe keeping or return.

The appearance of advertising does not constitute an endorsement of the products or services advertised.

Change of Address: Please notify your electric cooperative. See page 4 for contact information.



YOUR CO-OP

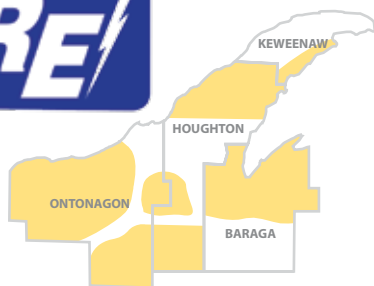
Pages specific to your electric cooperative: 1, 4-5, 8-9, 20-21, 24-25, 28

*Not in all editions

On the Cover

Cover illustration is by Dennis Preston.
artbypreston.com





500 J.K. Paul Street
Ontonagon, MI 49953
Phone: 906-884-4151
Toll-free: 800-562-7128
After hours: 866-639-6098

OFFICERS & DIRECTORS

Frances Wiideman, President
 Lake Mine/Toivola District

Calvin Koski, Vice-President
 Aura/Skanee District

Randy Myhren, Secretary/Treasurer
 Green/Firesteel District

Wayne Heikkinen, Director
 Pelkie/Keweenaw Bay/Herman District

Paul Koski, Director
 Ewen/Trout Creek District

George Rajala, Director
 Chassell District

David Anderson, Director
 Boston/Lake Linden District

PERSONNEL

Debbie Miles, General Manager

Bill Lundberg, Line Supervisor

Donna Siren, Billing Clerk

Wendy Mladenoff, Receptionist/Work
 Order Clerk

OTHER INFORMATION

Date of Incorporation: Sept. 30, 1937

Fiscal year-end: Dec. 31

countrylines.com/coops/ontonagon

MANAGER'S MESSAGE



Standing United Against Prop. 3

While we, the general managers and CEOs of Michigan's electric distribution co-ops support renewable energy, we also stand united against Proposal 3. This ballot proposal would amend the Michigan Constitution to include a 25 percent Renewable Portfolio Standard (RPS), which would be very expensive and extreme. Please consider the following important facts about Proposal 3 as you head to the polls on Nov. 6:

YOUR CO-OP IS A RENEWABLE ENERGY LEADER. Michigan's electric co-ops are already leaders in renewable energy, and we support the current 10 percent RPS set by the Legislature in 2008. Electric co-ops are key partners in Michigan's first commercial wind farm, which is located in the Thumb area and was built prior to any RPS requirements. One of our state's largest renewable energy resources, a hydro facility in Sault Ste. Marie, is also owned by an electric co-op.

THE CONSTITUTION IS THE WRONG PLACE FOR ENERGY POLICY. We strongly believe that the Michigan Legislature—not the constitution—is the place to enact far-reaching energy policy. While the Legislature's work can be "fine tuned" to allow for changes in technology, the economy or unintended consequences, these types of necessary adjustments would be nearly impossible to achieve if enshrined in the Michigan Constitution. The majority of the financial support for Proposal 3 is coming from out-

of-state special interest groups who would profit from binding energy policy into our constitution.

RENEWABLE IS NOT ALWAYS RELIABLE. Renewable energy has a place in our power supply toolbox, but its limitations make it less-than-ideal. Wind farms in the state typically only generate 30 percent of the time—and this "reliability" is often lower on the hot, still days when electricity demand is highest. By comparison, wind farms in Texas and parts of the upper Midwest often operate at levels exceeding 40 percent.

PROPOSAL 3 WOULD BE EXPENSIVE. Wind power in Michigan is very expensive. The Mackinac Center for Public Policy reports that it would cost the average residential ratepayer an additional \$170 to \$190 annually to achieve the 25 percent RPS suggested by Proposal 3. This cost estimate does not even include the additional costs of building new transmission lines or generation needed to "back up" the wind when it does not blow. Solar power is even more expensive, and better suited for other regions of the U.S.

We support renewable energy and the current 10 percent RPS, but encourage you to join us in voting "no" against Proposal 3. You can learn more about your co-op's concerns with Proposal 3 in this edition of *Michigan Country Lines* (pp. 11, 12-13) and at CAREforMich.com.

Tom Harrell
 Tom Harrell
 Alger Delta Cooperative
 Electric Association

Steve Boeckman
 Steve Boeckman
 Great Lakes Energy

Debbie Miles
 Deborah Miles
 Ontonagon County REA

Tony Anderson
 Tony Anderson
 Cherryland Electric Cooperative

Mark Kappler
 Mark Kappler
 HomeWorks Tri-County
 Electric Cooperative

Brian Burns
 Brian Burns
 Presque Isle Electric & Gas
 Co-op

Dan Dasho
 Dan Dasho
 Cloverland Electric Cooperative

Robert Hance
 Robert Hance
 Midwest Energy Cooperative

Dallas Braun
 Dallas Braun
 Thumb Electric Cooperative

Jukuri Honored For Many Years Of Co-op Service

After 47 years of serving electric co-ops, Gordon Jukuri, of Chassell, has retired from your Ontonagon County REA board of directors.

Jukuri was honored at an Open House on Sept. 20, where he received a framed “Special Tribute” signed by State Sen. Tom Casperson (R-Escanaba). Casperson sponsored the Tribute, which was passed by the Legislature and recognizes Jukuri’s service to Ontonagon County REA and the electric co-op program. Casperson’s 38th District serves 13 of the Upper Peninsula’s 15 counties, making it bigger geographically than nine states.

“Many of the successes of the cooperative program at Ontonagon County REA and the Michigan Electric Cooperative Association (MECA) are due, in part, to the daily efforts of outstanding directors like Gordon Jukuri,” the Tribute notes. It also credits Jukuri because his co-op service “successfully carried forward the work of the early pioneers who had a vision for a different life.”

Jukuri was elected to the Ontonagon co-op board in June 1986, served as board president since July 1995, and served on the MECA board since June 1991, for a combined 47 years of service.

“Mr. Jukuri provided invaluable service to and support of Michigan’s electric cooperatives and their members by being a steadfast advocate for MECA, a protector of co-op principles, and a co-op leader with integrity, reason, fairness and sound judgment,” notes Craig Borr, president/CEO of the Michigan



Gordon Jukuri recently received special recognition from the Michigan Electric Cooperative Association and a Tribute from the Michigan Legislature, sponsored by Sen. Tom Casperson, for his service to and advocacy for electric co-ops. Pictured with Jukuri are Fran Wiideman (L), Ontonagon County REA board president, and Debbie Miles, Ontonagon’s general manager.

Electric Cooperative Association.

Jukuri is also a successful local businessman and volunteer for other organizations.

“Gordon Jukuri embodies the finest virtues of a ‘Man of the Community,’” notes Fran Wiideman, the Ontonagon cooperative’s current board president. “His selflessness as

a leader, not only as a director and president of the Ontonagon board, but in the leadership and directorship positions he has held in other community organizations serving Keweenaw, Houghton, Ontonagon and Baraga counties, has earned him the utmost in recognition and respect.”

Staying On Top of Unsafe Products



In November 2010, the U.S. Consumer Product Safety Commission issued a voluntary recall of about 6,150 Honda and Mantis Mini Tillers with Honda GX25 mini four-stroke engines because of a fire hazard.

Each year, thousands of product recalls—many of them electrical devices—occur in the United States. Since some involve items that have already done great harm, it’s important to stay updated.

Recalls begin in two ways: A federal regulatory agency issues a mandatory recall, or the manufacturer voluntarily recalls the product after receiving information that it could be unsafe.

Stay on top of the dozens of recalls that are issued every week with these key sources:

► **Recalls.gov** – Six government agencies jointly created this site. It pulls information from the Consumer Product Safety Commission (CPSC), the National Highway Traffic Safety Administration, Food and Drug Administration, U.S. Department of Agriculture, Coast Guard, and the U.S. Envi-

ronmental Protection Agency.

In addition to the latest information, the site allows key-word searches through its archives and has a mobile phone app that enables consumers to get information when and where they need it. For example, at a yard sale or day care center, you could type in the name of a particular product to see if a recall has been issued.

Some of the agencies, including the CPSC, have RSS feeds, which automatically provide users with new information daily, and some also use Facebook, Twitter and other applications.

► **ConsumerReports.org** – This popular site has a safety blog where users can sign up for daily updates on recalls and other information, including illustrations of unsafe products.

Letters & More

Babysitting co-ops, the Mystery Photo winner, utility bill scams, a note from the editor, and lots on Proposal 3. It's all here in your readers' pages.

Babysitting Co-ops

Co-ops are amazing (Family/Sept. issue). You can find a [babysitting] co-op near you at SittingAround (sittingaround.com) or start your own and invite friends.

—Erica

No, Yes and Maybe On Proposal 3

My wife and I are part-time residents of Delta County in the Upper Peninsula, and members of Alger Delta Cooperative Electric Association. Our home of record, however, is in Waukegan, IL. Thus, we cannot vote in Michigan and wonder what we can do to speak up against 25 by 25 [Comment/Sept. "The Choice Is Clear: Vote No on Prop 3"].

We believe that generation and distribution of energy should, for the most part, be regulated by fair open-market competition.

Executive and judicial branches of government should not be creating or amending law at any level. As [you've] stated, this is the job of the legislative branch. My guess is there are a lot of part-time residents that would not support this initiative, but have little or no say in the matter.

—Michael Galbraith

Editor's Note: You can still sign up at CAREforMich.com to

be a supporter of the campaign opposing Prop. 3, and speak out by encouraging your Michigan friends to learn and vote.

Congratulations on a great and informative magazine. You really did a good job in the October issue on pages 11 & 22 explaining why Prop. #3 is more costly than it sounds, and not a good idea.

Thanks again for your wonderfully informative magazine.

—James Benner

My vote is my business and I really do not appreciate being told how to vote by my electric co-op (Comment, Sept.).

The cover of *Country Lines* glared out at me, and immediately I was angry.

It is one thing to inform people of the initiative...you crossed the line in telling members how to vote.

—Pat Grasser

I read with interest your column (Craig Borr, Sept.) "Choose Reasonable – Vote No on 25 x 2025." I have some thoughts to share with you...

I should inform you up-front that my wife and I are firm advocates of alternative power, developing resources other than coal, oil and gas. We recently were awarded a LEED "Platinum" certification for

our newly constructed cottage in Beulah by the U.S. Green Building Council, the first such designation for a private home in Benzie County. (I believe that it may be the only home with 'Platinum' designation in the tri-county area.)

I would normally agree with you that initiatives such as "25 x 2025" should be discussed and legislation enacted by the Michigan Legislature. However, you know as well as I that any attempt to develop and increase use of alternative energy is not going to come out of our Legislature...or at least our present Legislature. They cannot even get their act together on the new international trade bridge which is strongly supported by Governor Snyder!

I do not really care what former Attorney General Frank Kelley recently wrote in the *Detroit Free Press*. He is entitled to his opinion and I am pleased to see that he has one. I also do not care if this initiative is '... being financially supported by outstate special interest groups and foundations from California and Colorado'. If their money can create jobs in our state, that's fine with me. A job is a job to someone who is unemployed up here in north-west Michigan.

With all this being said,

I am very much opposed to using our constitution for this energy initiative. I do not feel that this is the type of issue that should be a part of our state constitution. I shall probably vote 'No' on this energy issue even though I support the end result.

But I think that energy executives—such as you—should come up with a plan that you CAN support. That is the reason for many voters' concerns. We know what you are AGAINST – '25 x 2025' – but give us a plan that shows what you can support. You are in agreement with 10 percent by 2015. Great. Wonderful news. But, can you do 18 percent by 2025? Can you do 20 percent by 2030? I, like many voters, prefer to review as many alternatives as possible to determine the best course of action.

If you would like to see a "No" vote in November on "25 x 2025," cobble together a plan with your fellow CEOs and lay it out for the public to review.

Thank you for your time.

—Jack Witham

Apparently, the choice is clear for him [Craig Borr]. But he has unnecessarily and needlessly muddied up the waters for your readers.

Passing the 25 x 2025 proposal is critical to Michigan's future, the next generation (children/grandchildren), and our economy. His criticism of the proposal because it would change the Michigan Constitution is a smoke screen for his



◀ DO YOU KNOW WHERE THIS IS?

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

We do not accept Mystery Photo guesses by phone! Email mysteryphoto@countrylines.com, or send by mail to *Country Lines Mystery Photo*, 2859 W. Jolly Rd., 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 January 2013 issue.

The September contest winner is Greg Madill of Lansing, who correctly identified the photo of a display behind the museum in the Escanaba City Park.



Beware of Phone Scams

The White House is *not* paying your electric bill.

Thousands of consumers from coast-to-coast, including electric co-op members, have fallen prey to a telephone scam promising bogus help with energy bills.

The criminals told residents that President Obama had authorized a special federal program to pay electric bills. Then, they asked each victim for personal information, such as a bank routing number or Social Security number, to get the payment.

While this particular scam appears to have run its course, the National Rural Electric Cooperative Association (NRECA) stresses that scammers are always creating new ways to steal personal information. Always guard your personal accounting and banking information and never share it with strangers.

Great Lakes Energy (GLE), headquartered in Boyne City, MI, had reports of two different scams this year. The first was someone who called a member and claimed to be from “MECA’s Energy Optimization program.” The caller asked when he could come over and inspect the house as part of an energy audit. The member said he wouldn’t be available that day, and the caller hung up. Suspicious, the member reported this to Great Lakes Energy, which put warnings on their website and through Facebook and Twitter.

Another GLE member received a call advising him that “they” couldn’t read his electric meter, and to avoid “high charges” he needed to call several 900 numbers. The member called several, then hung up when a recording advised him he would be charged a small sum (about \$1.98) for the call. He then called to verify



that all was well with his GLE account and meter.

“If you are unsure a phone call or e-mail from your co-op is legitimate, contact the co-op through known, published numbers, and do not use contact information given in the suspicious phone call or e-mail,” advises Mike Youngs, GLE’s director of information assurance.

As for the federal scam, six members at a South Carolina electric co-op were bilked, and a few had power cut off as a result. These co-op members thought their bill was paid without checking with the co-op to be sure. At least five other states have issued consumer warnings. The Mississippi attorney general’s office took over 1,000 calls from residents about the scam.

Scams do happen, but it’s usually because a member gives personal information to someone they believe is from the electric co-op or other utility. Falling for a scam can be very expensive, resulting in stolen identity, bank and credit card fraud, and unpaid electric bills.

NRECA offers these tips to help avoid being scammed:

- Only use co-op authorized methods to pay electric bills.
- Electric co-op employees visit a home only in response to a service request. If a service call was not scheduled or requested, do not allow the person to enter your house.
- When an employee does come in response to a service call, check identification and make sure the truck is clearly marked with the co-op’s logo or name.

With the federal scam, much of the crime’s success occurred because the victims, not realizing they were scammed, told neighbors and friends of the wonderful “bill payment program.”

If something seems too good to be true, it probably is.

— Angela Perez

real objection, which he scrupulously avoids stating.

It is being proposed as an amendment to the constitution because neither the governor, nor any state agency, nor the state Legislature has the guts to move forward with the notion that we should get 25 percent of our electrical power from renewable resources. Amending the constitution is the way around all the bureaucrats who will not listen to the people.

The additional costs for electric utilities to move to a 25 percent level of renewables are far below the additional costs we would incur if we continue to rely on fossil fuel, especially coal, to meet our electrical needs in the future.

— Rich Dykstra

I picked up the latest *Country Lines*, assuming I would vote against the ballot initiative on renewable energy. Renewable energy is like motherhood, and I objected to it being on the ballot particularly because I don’t think the average voter has any idea of the enormous difficulty of achieving the 25 percent mandate by 2025.

However, your column has me reconsidering my position. It bothers me to have the CEO of the Cooperative Association, in the co-ops’ magazine, refer to the initiative as a “power grab” by “special interests.”

It seems you are using your private podium to characterize the misguided but well-intentioned proposals with terminology unsuited to a serious discussion of the topic.

I hope any future columns will be more responsible.

— Lee Runk

From the Editor

Thanks to all our readers who take time to send letters or comment online at countrylines.com.

We’ve had lots of feedback in the last few months—both positive and negative—on Proposal 3. Many reader concerns about cost, reliability, the environment

and jobs related to that proposal are addressed on pages 4, 11, 12-13, and 26. This may seem like a lot of coverage, but your electric co-op thinks it’s one of the most important energy issues our state has faced in decades.

We encourage everyone to learn the facts on **all** the ballot proposals before voting (Secretary of State is just one source at michigan.gov/sos).

— Gail Knudtson

HOW TO SEND A LETTER Readers are encouraged to submit thoughtful, courteously-worded letters, and we print as many as possible in the space and time allowed.

CountryLines reserves the right to print letters at the publisher’s discretion, based on length, space and content, and to edit slightly for space and facts. Please limit comments to 240 words or less. Submit by posting online at countrylines.com, email gknudtson@meca.coop, or mail to: Editor, Country Lines, 2859 W. Jolly Rd., Okemos, MI 48864.

Sweet Success



Petoskey's new Maple Moon Family Sugary promotes Michigan's economy and energy efficient technology.

Todd Petersen sees far more in maple trees than the leaves turning color in the fall. He sees an entire industry that Michigan is potentially passing by. And he's trying to change that, one tap at a time.

In February, Petersen opened Maple Moon Family Sugary—a business he hopes will prove to state officials that there's a future in maple sugar production.

"Do you realize that maple syrup can only be produced in North America?" Petersen asks. But the stats are more interesting the farther you dig: Quebec produces about 75 to 80 percent of the world's total volume of maple syrup. And Vermont, the top U.S. producer, follows at about 15 percent. Meanwhile, Michigan produces only .07 percent.

But here's the kicker: "Michigan has six times the hard sugar maple capacity in quality and quantity of trees that Quebec does," Petersen says. "We're on to something big here, Michigan has an opportunity."

The opportunity is one that Petersen is trying to get in front of state legislators. If, like Vermont does, the state would allow tapping of some state trees, the industry could boom.

"There's great potential for producers to lease trees from both their neighbors and from the state," he explains. "There's a lot of hilly private land that can't be farmed, and most of the good timber-quality trees have been cut. But there's still potential in the remaining trees."

Above photo: Tapped maple trees are connected by a series of tubes that use sloped land to gravity-feed the sap into a vacuum-sealed system allowing for much smaller holes in the trees.



Petersen noted that it takes 120 to 200 years for a maple tree to grow to a valuable timber size. "It's a long, long process," he says. "That, and the problem of overcutting can hurt more. It's completely possible to have a balance between the timber-cutting industry, which is vital to Michigan's economy, and maple sugaring. The model already exists in Vermont."

The beauty of maple sugar production is that younger trees can be used and re-used. With proper technique, trees 7 to 12 inches in diameter can support one tap, trees 12-18 inches can support two, and trees 18 inches or larger can support three taps or more when high vacuum is applied through the tubing systems.

Petersen uses a new, automated high-vacuum and air-tight system that produces

up to three times the yield of traditional methods to tap his own trees. "The machines literally suck the sap out of the tree like the automated milkers they use on cows in the dairy industry. It allows us to tap a much smaller hole," he adds. "There is not as big of a wound in the tree, which makes for healthier trees."

The vacuum-sealed system also prevents bacteria from getting into the hole and damaging the tree. And, there's no doubt it's entirely different from Petersen's old hobby of tapping maple syrup. "I had 40 buckets and used a turkey cooker to make syrup!" he says with a laugh.

In the Petersen family's relatively small sample of northern Michigan forest—27 acres of an 80-acre farm—they harvested 700 gallons of maple syrup in their first year with the new system. And the season this February was very short, due to weather conditions. Instead of the usual 40-45 day season, they had just 12 days to harvest.

"This is exceptional, considering the short season," he says. "We garnered only about 30 to 40 percent of an average crop."

And, the way Petersen did it is the next thing creating a buzz in the industry: using reverse osmosis. The new equipment uses electricity instead of relying solely on wood or fossil fuels.

Sap, he notes, is normally about 98 percent water and 2 percent sugar. In the old process of using evaporation, the sap was



Photos – Andree Magsig, drephotography.net



Above, left: Todd Petersen is standing by the electricity-driven reverse osmosis machine used to process maple sap into syrup. This process uses 70 to 90 percent less fuel than traditional methods, which rely mostly on wood and fuel oil.

Center: Son Luke is scooping the signature Maple Moon ice cream created by Moomers.

Right: Daughter Maggie is known for being an expert labeler of the pure Michigan Maple Syrup jars. All family members work in the business.

heated using wood or fuel oil to evaporate the water. It took about 3 gallons of fuel oil to produce 1 gallon of syrup.

With reverse osmosis, electricity creates high pressure that is used to force the sap through a fine membrane. The process separates out the sugar and most of the water, reducing the need for fuel oil to about a half-gallon for the same 1 gallon of syrup. The result is 70 to 90 percent less in fuel oil costs.

“This year, in our small facility, that saved us more than \$3,000 in energy costs and reduced our carbon footprint significantly,” Petersen says. “In a typical year with a bigger crop, it would save us up to \$10,000. The machine pays for itself in three years.”

And, Petersen is hoping others are watching what he does as the new farm and equipment begins to produce data.

“We are a working model for showing Michigan what this industry can do,”

Petersen notes. “What if we can grow our state’s production to 10 percent in 20 years? To 40 percent in 50 years?”

And of particular note is that the industry creates local, hands-on jobs.

“These are jobs that can’t be shipped off to Mexico or China,” he says. “It’s exciting to be able to do this here in Michigan, in Petoskey, in the beauty of northern Michigan.”

In recent years, other hi-tech farms and models have popped up in Michigan, Petersen says, and interest seems to be sparking in legislators working in agriculture and natural resources.

The next maple syrup run, in February 2013, will mark Maple Moon’s second year of production. Petersen bought the property four years ago and has since invested \$300,000 in the farm—a move he made with the support and hands-on help of his fam-

ily, including wife Christi and their children Luke 13, Haley 11, Kyle 8 and Maggie 6.

“I wanted this to be a family-run business and I wanted my kids to learn about the values of hard work, ethics, responsibility, cooperation, communication, and the outdoors,” he says, noting that the entire family learned side-by-side as they ran lines and tapped trees.

Maple Moon Family Sugary also gives tours year-round to the public. “I want people to see this, to touch this, to see what trees produce and how,” says the Great Lakes Energy Co-op member.

The Petersen family also offers other products like homegrown honey, granolas, cookies, candies, jams, salsas, ice cream, and even root beer made from maple sugar. Visit their website (mmsyrup.com) for more about their farm and to go on a tour.



Maple Carrots

6-8 carrots

2 tablespoons brown sugar

2 tablespoons maple syrup

2 tablespoons butter

Wash and peel carrots; cut into 1-inch pieces. Cook in covered pan with ½ cup water for 15 minutes. Drain carrots and place in a greased baking dish. Mix together syrup and brown sugar and pour over the carrots. Dot with butter. Bake at 375° for 15-20 minutes. Serves 4.

Visit mmsyrup.com for more recipes, photos, products, farm blog and more!

Are Window Efficiency Claims 'Up To' Any Good?

Replacing old windows boosts a home's energy efficiency, but how much? A new Federal Trade Commission (FTC) study cautions consumers not to expect all claims to live up to perceived expectations.

Energy-efficient windows do offer lower heating, cooling and lighting costs; replacing old windows with qualified models can cut a home's energy bill 7 to 15 percent, reports the U.S. Department of Energy's ENERGY STAR® program. But true savings depends on proper installation and the type of windows installed—facts that folks often miss when reading advertisements.

To understand how consumers perceive advertisements, the FTC studied how 360 consumers in five states interpreted the potential energy savings of advertised windows.

One of the ads claimed the following: "PROVEN TO SAVE UP TO 47 PERCENT ON YOUR HEATING AND COOLING BILLS!" Another version removed the words, "up to," while a third added this disclosure: "The average owner saves about 25 percent on heating and cooling bills."

Over one-third of consumers who saw the "Up To" version reported the advertised windows would save homeowners 47 percent on their energy bills—a far cry from the true average savings. And, including a disclosure statement didn't weaken the ad's impact.

The FTC believes its report will help advertisers avoid using misleading 'up to' claims, says David Vladeck, Bureau of Consumer Protection director. Earlier FTC studies stopped misleading or deceptive ads from five replacement window manufacturers.

A Deck-the-Halls Energy Tip:

Using light-emitting diodes (LEDs) for holiday decorating offers you savings and safety.

LEDs use less energy and last longer than incandescent lights, with a life span of about 20,000 hours, or about 40 holiday seasons. Running LEDs on one 6-foot Christmas tree (40 days/12 hours each) can bring energy savings of 90 percent or more over traditional lights.

Because they use less energy, LEDs are safer for connecting multiple strands without overloading the outlet, and are cooler to the touch, which reduces injury and fire risks. And because LED bulbs are so strong (no glass or filaments) one individual outage generally won't darken the whole strand.

Find manufacturers of ENERGY STAR-qualified LED decorative lights at energystar.gov.



An important message from the Federal Trade Commission

Shopping for New Windows?

If you're thinking about replacing windows in your home, the choices you make about style, materials, and installation could have a big impact on your energy bill. Here are some things to consider.

Choosing Your Windows

Cost Price per window ranges from a few hundred to a few thousand dollars, depending on materials, features, and installation costs.	Materials Wood frames offer good insulation, but are heavy and high-maintenance. Vinyl-frames insulate well and don't need painting.	Style Single-hung, double-hung, and sliding windows leak more air than casement, awning, and hopper windows.
Glazing & Glass Technologies Some glazes and glass provide better insulation, light, and condensation resistance. Windows with low-emissivity (low-e) coatings often are more energy efficient.	Cleaning & Maintenance Some materials and features make windows easier to care for. Tilt-in sashes, for example, make cleaning easier.	Installation If windows aren't installed according to manufacturer's instructions, you might not get the savings or comfort expected.

An Energy-Rating Label to Help You Shop

Look for the National Fenestration Rating Council's label when you shop.

U-factor: Rates how much heat escapes through a window; most important in cold climates. Range: 0.2 — 1.2		Solar Heat Gain Coefficient: Rates how much heat from the sun is allowed in. This is most important in warm climates. Range: 0 — 1
Visible Transmittance Rates how much light comes in. Range: 0 — 1	ENERGY PERFORMANCE RATINGS U-Factor (U.S.A-P) 0.30 Solar Heat Gain Coefficient 0.30 ADDITIONAL PERFORMANCE RATINGS Visible Transmittance 0.51 Air Leakage (U.S.A-P) 0.2 Condensation Resistance 51	Air Leakage Rates how much outside air comes in. Range: 0.1 — 0.3
Condensation Resistance Rates how well a product resists condensation. Range: 1 — 100	= ratings may not be on the label, but may be online or from the vendor	

For more information visit energysavers.gov or efficientwindows.org

Proposal 3 Is a Power Grab

It was a privilege for me to serve as Michigan's Attorney General for 37 years. During that period of service to the people of Michigan I gained in-depth experience in the fields of constitutional law, consumer protection and environmental protection. I also was able to acquire knowledge in the field of regulatory law governing public utilities and other corporations, public and private.

Like you, I am worried about extreme partisanship in our politics, which is causing our citizens to be confused and disappointed with our government.

I am compelled to write now that special interest groups—whether it's the millionaires pursuing new casinos, or the money behind the energy proposal—are taking advantage of our present legislative impasse. These powerful groups are attempting to avoid the proper way of making laws through our duly elected legislature and congress. These multi-million dollar interest groups want to amend our state constitution by placing a single self-serving law on this fall's ballot.

You will be asked to amend the Michigan Constitution with a proposal called "25 x 25" [Proposal 3]. This scheme would mandate that 25 percent of all energy produced for use in Michigan would be from the sun or the wind by the year 2025. This would allow this special interest group to put millions of dollars worth of wind turbines and solar generation all over Michigan's landscape, without any proof that such tremendous investment can be utilized or will be even needed after its installation.

The whole idea of adding renewable energy to Michigan's power needs has already been provided for in a proper law passed in 2008. After two years of thoughtful debate, the 2008 law, as passed, requires Michigan to generate 10 percent of its electricity from renewable sources,



Frank Kelley

such as wind, solar and hydro by 2015, which is only three years from now.

In my considered judgment, this "25 x 25" special interest proposal to amend the constitution this fall is a reckless abuse of constitutional law and would take away our rights

and flexibility to provide our families and corporations with reliable electrical service in the future.

The constitution is a document that provides what powers our government can have and what rights of freedom we citizens of that government can enjoy. The constitution is not to be used for passing independent laws for enriching special interest groups by granting them uncontrolled power.

I am backed-up in my view of this matter by Abraham Lincoln, who said: "We the people are the rightful masters of both Congress and the courts, not to overthrow the Constitution but to overthrow the men who pervert the Constitution."

Take it from me, "25 x 25" is a power grab and against our interests. It should be opposed by every thoughtful citizen.

Respectfully submitted,

*Hon. Frank Kelley
Former Michigan Attorney General*

Others Who Oppose Proposal 3:

Citizens for Wind Energy
FiveCAP Community Action Agency
Gaylord Chamber of Commerce
Great Lakes Bay Regional Alliance
IBEW (International Brotherhood of Electrical Workers)
Iron Workers Local 25
Manufacturers Supply Company
Michigan Association of Counties
Michigan Assn. of Home Builders
Michigan Association of Realtors
Michigan Building & Construction Trades Council
Michigan Chamber of Commerce
Michigan Electric Cooperative Assn.
Michigan Electric & Gas Association
Michigan Farm Bureau
Michigan Food Producers
Michigan Manufacturers Assn.
Michigan Milk Producers Assn.
Michigan Municipal Electric Assn.
Michigan Steel
Mich. State Utility Workers Council
Michigan Sugar Company
Monroe County Community College
Montcalm County Panhandle Area Chamber of Commerce
Northern Lakes Economic Alliance
Small Business Assn. of Michigan
Muskegon Lakeshore Chamber
OmniSource Corp. - MI Division
Petoskey Regional Chamber of Commerce
Prairie Farms Dairy
Plumbers & Steamfitters UA Local 85
Saginaw Chippewa Indian Tribe
The Port City Group
Traverse City Area Chamber
UWUA (Utility Workers Union of Amer.)
...and many individual citizens.

Visit CAREforMich.org for a full list of Proposal 3 opponents.

Electric co-ops believe in a responsible approach to achieving clean, affordable, renewable energy.

Renewable Energy:

On Nov. 6, you will have a chance to play an important role in establishing Michigan public policy. Besides having the opportunity to select candidates, six statewide ballot proposals will be presented for your consideration. One in particular, Proposal 3, will have far-reaching effects on our state's economy and environment, if it's approved.

At first glance, Proposal 3 is deceptively attractive. It would require 25 percent of all Michigan's electricity to be generated by in-state renewable sources—specifically, wind, solar, biomass and hydro—by 2025. The devil is in the details, however, and the unintended consequences of this proposal would be particularly harmful to co-op members living in rural areas. Before voting, be sure you understand all the costs associated with locking this renewable energy policy into the state constitution.

FINANCIAL COSTS

Michigan is already on track, by state law, to get 10 percent of its energy from renewable sources by 2015. This law will be reviewed in 2015 to ensure Michigan continues on an affordable, reliable path to clean energy, and it can be changed if needed to adjust to new technologies or spare consumers from unreasonably high costs.

Proposal 3 language limits rate increases to 1 percent annually, but this is misleading. A 1 percent increase every year, over a 13-year period, represents a cumulative 13 percent increase in the final year, and every year after. This cap does not include related costs—such as building necessary transmission systems and back-up generation for when the wind doesn't blow—or normal rate increases not associated with this measure. The Mackinac Center for Public Policy reports that Proposal 3 would cost the average residential ratepayer an additional \$170 to \$190 per year by 2025.

JOBS & OTHER ECONOMIC COSTS

Proposal 3 backers claim it will create tens

At Any COST?

of thousands of jobs in green industries, but there's no credible way to predict such job creation. Similar claims were made when the current Renewable Portfolio Standard (RPS) was enacted in 2008, but actual job creation has fallen well short of the hoped-for projections.

Ironically, current wind projects under construction in Gratiot County are manufactured overseas and out-of-state. The *Muskegon Chronicle* reported that Muskegon's shipping port has received multiple loads of turbine tower sections from South Korea, and is expecting more turbine blade shipments from Germany this fall. The "value-added" portion of the turbines for this project—hubs, gear box and generator—are produced in Arkansas.

While transporting and assembling of blades and tower sections may provide some short-term jobs, they are not sustainable jobs. More likely, Proposal 3 will kill full-time utility jobs and place another handicap on Michigan's economic growth. The added impact on electric rates will force businesses to spend money on higher energy costs instead of hiring new employees. Worse yet, if energy rates become uncompetitive, Michigan employers will look to relocate across state borders.

None of the states that Michigan competes with for economic development projects has a 25 percent RPS, and no state in the nation has an RPS locked into its constitution. A model simulation coordinated by the Mackinac Center for Public Policy estimates the proposal would result in a loss of over 10,500 jobs.

Many of the state's trade unions, including the Utility Workers Union of America, Iron Workers Local 25, and the International Brotherhood of Electrical Workers, oppose the measure. They are concerned about the job loss it would create.

"I've looked hard, but I can't find anything in this proposal that would guarantee real jobs for the people who need them," says

Pat Dillon, national president of the Utility Workers Union of America. "Things are finally looking up in Michigan and people are starting to get back to work. We need to protect those jobs, not gamble with them, and that's what this proposal would do."

ENVIRONMENTAL COSTS

While the proposal is intended to improve the environment, it would change our state's beautiful landscape and lakeshores forever. The 25 percent mandate would require 3,100 more wind turbines in the state, each taller than the Statue of Liberty, which lined up side-by-side would require space four times the area of Detroit, Grand Rapids, Flint, Lansing, Ann Arbor, Kalamazoo, Saginaw and Traverse City—combined!

Proposal 3 does not include any plan for where to locate the additional wind turbines and high-voltage transmission lines, and no environmental impact study has been done to understand the impact on birds and other wildlife. Today, local communities set their own zoning standards and ordinances

to govern the development of wind farms and other renewable energy projects. If the proposal is locked into the state constitution, such zoning laws could be challenged on constitutional grounds and potentially overturned, stripping local officials of their authority. Or, the need for so much land to meet the constitutional requirement could force the state government to step in and impose a statewide zoning ordinance. Some industry observers believe the adoption of Proposal 3 would very likely reignite the debate about placing wind turbines in the Great Lakes.

Simply put, Proposal 3 is bad for co-op members, and bad for Michigan. Michigan electric co-ops support the current 10 percent by 2015 RPS, but do not support amending the constitution to enact energy policy (see related articles on pgs. 4, 11 and 26). Please consider all "costs" associated with Proposal 3 before heading to the polls Nov. 6.

Voting "No" on Proposal 3 is a vote for ensuring that Michigan continues on an affordable, reliable path to clean energy.

BALLOT LANGUAGE

PROPOSAL 12-3

A PROPOSAL TO AMEND THE STATE CONSTITUTION TO ESTABLISH A STANDARD FOR RENEWABLE ENERGY

This proposal would:

- Require electric utilities to provide at least 25% of their annual retail sales of electricity from renewable energy sources, which are wind, solar, biomass, and hydropower, by 2025.
- Limit to not more than 1% per year electric utility rate increases charged to consumers only to achieve compliance with the renewable energy standard.
- Allow annual extensions of the deadline to meet the 25% standard in order to prevent rate increases over the 1% limit.
- Require the legislature to enact additional laws to encourage the use of Michigan made equipment and employment of Michigan residents.

Should this proposal be approved? YES NO

Home Heating Assistance Programs • 2012–2013 Season

The Michigan Public Service Commission and the state's regulated gas and electric companies, including rural electric co-ops, are encouraging senior citizens, low income, and unemployed utility customers to **"Be Winter Wise"** if faced with high bills they cannot pay this winter. "Winter Wise" customers will be protected against loss of their utility service.

Program: Winter Protection Plan

Contact: Your Local Utility Company

Income Guidelines 2012–2013	
# in Household	150% Poverty Guide Maximum Income
1	\$16,755
2	22,695
3	28,635
4	34,575
5	40,515
6	46,455
7	52,395
8	58,335
Add \$5,940 for each additional member.	

Note: All customers 65+ are eligible regardless of income. Customers are responsible for all electricity and natural gas used. At the end of the protection period, participants in the plan must make arrangements with their utility company to pay off any money owed before the next heating season.

The **Winter Protection Plan** protects eligible senior and low-income customers from service shut-offs and high utility bill payments during the winter months (Nov. 1–Mar. 31). You may enroll between Nov. 1 and March 31. If you are an eligible low-income customer, your utility service will remain on from Nov. 1 through Mar. 31, if you:

- pay at least 7% of your estimated annual bill each month, *and*
- make equal monthly payments of 1/12 of any past due bills.

When the protection period ends (Mar. 31), from April 1 through Oct. 31, you must begin to pay the full monthly bill, plus part of the amount you owe from the winter months when you did not pay the full bill. **Participation does not relieve customers from the responsibility of paying for electricity and natural gas usage, but does prevent shut-off during winter months.** You qualify for the plan if you meet at least one of the following requirements:

- you are age 65 or older,
- you receive Department of Human Services cash assistance, including SSI,
- you receive Food Stamps,
- you receive Medicaid, or
- your household income is at or below the 150% of poverty level shown in the Income Guidelines chart at left.

Senior citizen customers (65 or older) who participate in the Winter Protection Plan are not required to make specific payments to ensure that their service will not be shut-off between Nov. 1 and March 31. However, seniors are encouraged to pay whatever they can during the winter so they will not have large, unmanageable bills when the protection ends.

Program: Home Heating Credit

Contact: Mich. Dept. of Treasury

# Exemp.	Max. Income	# Exemp.	Max. Income
1	\$12,299	4	25,357
2	16,671	5	29,728
3	21,014	6	34,071
Add \$4,343 for each additional member.			

You can apply for a **Home Heating Credit** for the 2012 tax year if you meet the income guidelines listed at left, or you qualify based on alternate guidelines including household income, exemptions, and heating costs. Additional exemptions are available for seniors, disabled claimants, or claimants with 5% or more of their income from unemployment compensation.

If you qualify, you may receive assistance to help pay for your winter heating bills. The average credit for the 2011 tax year was \$135. Forms are available mid- to late-January wherever tax forms are provided, or from the Michigan Dept. of Treasury (517-636-4486, or michigan.gov/treasury). The Home Heating Credit claim form must be filed with the Michigan Dept. of Treasury **before Sept. 30, 2013**.

Program: Earned Income Credit

Contact: U.S. Treasury Dept.,
Internal Revenue Service
irs.gov/EITC

Michigan Dept. of Treasury
michigan.gov/treasury

The **Earned Income Credit (EIC)** is a refundable federal income tax credit for low-income working individuals and families who meet certain requirements and file a tax return. Those who qualify will owe less in taxes and may get a refund. Even a person who does not generally owe income tax may qualify for the EIC, but must file a tax return to do so. If married, you must file jointly to qualify. File Form 1040 or 1040A and attach the EIC.

You may claim a **Michigan earned income tax credit** for tax year 2012 equal to a percentage of the federal earned income tax credit for which you are eligible. See the 2012 MI tax booklet for additional information.

Program: Crisis Assistance Program

Contact: Local Michigan Department of Human Services (DHS)
michigan.gov/mdhs

State Emergency Relief Program (SER): You do not have to be a client of the DHS to apply. This program is available year-round, subject to the availability of funds, to assist low-income households that have a heat or electric shut-off notice or a need for deliverable fuel. However, if you receive a DHS cash grant, you may vendor part of that grant towards heat and electric bills. Contact your local DHS or call the Home Heating Hotline, 855-275-6424.

Program: Low-Income Home Weatherization

Contact: Local Community Action Agency

You may be able to receive help with weatherizing your home to reduce energy use if you meet low-income eligibility guidelines (150% of poverty guidelines shown above) and funding is available. **Weatherization** may include caulking, weatherstripping, and insulating. Contact your local Community Action Agency for more information. Visit mcaaa.org to find one in your area.

Program: United Way

Contact: Call 2-1-1 or UWmich.org/2-1-1

2-1-1 is a free phone service operating 24 hours per day providing callers information about resources that may be available in their particular area to help with utilities and other needs. Learn more at UWmich.org/2-1-1.

Program: Medical Emergency Protection

Contact: Local Utility Company

You are protected from service shut-off for nonpayment of your natural gas and/or electric bill for up to 21 days, possibly extended to 63 days, if you have a proven **medical emergency**. You must provide written proof from a doctor, public health or social services official that a medical emergency exists. Contact your gas or electric utility for more information.

Program: Shut-off Protection for Military Active Duty

Contact: Local Utility Company

If you or your spouse has been called into **active military duty** you may apply for shut-off protection from your electric or natural gas service for up to 90 days. You may request extensions. You will still be required to pay, but your utility company will help you set up a payment plan. Contact your utility service provider.

The Craft Lady of Caro



Mollie Hartel values the combination of handcrafting and family.

According to KnitMeter.com, if Mollie Hartel unraveled all the yarn she's crafted into projects this year it would stretch about 173 miles. It would reach from her home in Caro to the family's log cabin at Fife Lake, south of Traverse City, and back to the Thumb.

The online yarn-usage calculator isn't the only measure of her productivity. Mollie's hats and mittens are warming the heads and hands of her husband Scott, son Brandon and daughter Rachel and their spouses, four grandsons, and countless other relatives and friends she's gifted with her handiwork. Strangers, too, are cozier in the hats, scarves, mittens and baby sweaters she's made for those in need at domestic abuse and alternative care centers.

You won't, however, find her fiber arts projects for sale. "I've never done a craft show. To have to 'knit to order' turns it into work," explains Mollie. She likes to create what and when she wants, even to switch projects midstream. "That's when it's fun for me."

The prolific knitter is a self-described "computer geek" who worked in the IT business for over 25 years before directing her expertise to Scott's company, Testing Services Group, in Lapeer. Her part-time post there allows her plenty of opportunity to knit, crochet and sew—skills she learned as a young girl growing up in Cass City from her grandmother, Mollie Holzwart.

By the time Mollie reached high school,

her fiber arts talents were well-known around town. She'd swept the 4-H ribbons at the county fair and, instead of enrolling as a student in Home Ec class, was made an assistant to the teacher. It's not surprising that she made her dress for the high school prom, but Mollie also stitched a tuxedo for her date and future husband, Scott. The Cass City couple met in second grade and started dating at age 15. When the bride created her wedding gown, she incorporated lace crocheted by Grandma Mollie.

Although Mollie always has a variety of projects in the works, from piecing together quilts to making mosaics from broken Fiesta ware, knitting is her predominant craft, largely because it's the most portable. "I can take it with me anywhere," she says. A recent seven-hour road trip to see the Detroit Tigers play in Cincinnati meant another pair of socks for a future gift. "I've knitted in canoes, innumerable ballgames, movies, in the dark... it's what I do."

Living Crafts magazine has featured two of Mollie's projects, both inspired by her grandsons. One is an original design for knitted mittens with long cuffs to cover the skin between the mitts and jacket that is typically exposed to the cold. The cover of the January 2012 issue of *Living Crafts* shows her "Blankie Baby," something Mollie created for the boys because, she explains, "Matchbox toys were too noisy for church; they needed a quiet toy, so I made one."

The "Blankie Baby" pattern is included



Mollie's Blankie Baby pattern, above, was featured in *Living Crafts* magazine.



Contact Mollie Hartel at 989-673-4610, email hartel_m@hotmail.com, and visit her blog at mollismaterials.blogspot.com.

in the magazine and sold at ravelry.com, a website for knitters. The dolls, which her grandsons call "Abba Babies" (after their nickname "Abba" for Mollie) measure about 8 inches tall and 5 inches across, and are made of superwash wool and sock yarn because they're washable and durable. The heads are stuffed with a bit of quilt batting to give them some dimension.

"It's an absolute privilege and joy having grandkids to do this for," says Mollie of her projects. "The thing I'm most proud of is that I have a family who appreciates what I do."

For self-conscious, would-be crafters she encourages, "There isn't anybody who isn't a crafty person. They just haven't found their medium yet." She suggests experimenting with different materials because, "There's a value to handcrafting. Anybody can spend dollars to purchase a gift, but to make something for someone...it shows time and caring. There's no limit to the value that making things can mean to someone."

Top Finds In toys

Some seasons feel like life in fast motion. Long before Labor Day, my little granddaughters have dog-eared catalogs of coveted Halloween costumes. Now, almost before the Jack-o'-Lantern has cooled, they're dreaming of holiday wish lists. As much as I resist, it's hard not to catch their excitement. But how to choose from a dizzying array of gift options?

One good resource I have found can help. If you're looking for holiday gift ideas for the special kids in your life, now is a good time to check out the National Parenting Center's Seal of Approval program. For two decades, this organization has been testing and finding the latest award-winning products and services, as judged by parents and children.

The testing involves a multi-step process conducted over eight weeks. Staffed by volunteers, the testing facility of The National Parenting Center gives parents, children and educators the opportunity to examine a variety of submitted products. The testers are encouraged to play with, build, read about, and judge by the reactions of the children, each product's quality.

Each product is rated its level of desirability, sturdiness, interactive stimulation and other ingredients essential to a quality product.

The Fall 2012 Seal of Approval report is ready for review at tnpc.com/search/Fall-12soaframes.asp, but you can also browse all the seal winners since 1992 at tnpc.com/soa/listsoa.htm.

Some Top Picks for the 2012 Holidays

This year's list contains some traditional toys and educational products, while reflecting the rising popularity of mobile technology.

"We are surely seeing a movement towards mobile products and apps and even traditional games adding in a level of connectivity to keep current, says David Gaynes, product testing manager for the program. "We have discovered some wonderful apps including, 'The Monster at the End of This Book' from Sesame Street, 'Toy Story Showtime' and 'Brave: Interactive Comic'



Play Doh Candy Cyclone



These and other toys mentioned in this article meet the National Parenting Center's Seal of Approval.

from Disney Publishing."

There's even an app that can teach your child (ages 4 and up) how to speak a new language. Little Pim Spanish, French, and Chinese apps impressed the testers with their crisp, clear graphics and vibrant colors. Testers say the narrator's voice is easy on the ears and the vocabulary being taught is simple and helpful. Categories include child-friendly concepts such as waking up, eating, drinking and playtime. While only an introduction to language, the apps do what they are supposed to: make learning other languages fun.

When it comes to gifts, Gaynes has some recommendations:

"For crafty kids I'd recommend 'Duct Tape Bangles' from ALEX, 'My Friendship Bracelet Maker Traveler' from Choose Friendship, 'PlusCraft BFF Pillow' from The Orb Factory, and a book called '101 Great Gifts Kids Can Make' by Gryphon House." He also recommends the "Play-Doh Candy Cyclone" from Hasbro.

"It's not traditional crafts, but a blast," he notes.

For video game fans, Gaynes urges parents

to consider the Kinect games.

"There are two amazing games that get kids up and moving and are fantastic," he says, 'Kinect Star Wars' and 'Kinect Rush: A Disney/Pixar Adventure.'"

Gift-givers can also check out "LEGO Batman 2: DC Super Heroes," which is a more traditional Xbox controller game.

When it comes to more traditional toys, look for "Tranquil Turtle" from Cloud B, which is bound to melt everyone's heart. Other 2012 favorites include "Pour and Float Froggy" from VTech—a great bathtime toy—and Folkmanis "Little Puppets." "Trucky 3" from Smart/Tangoes is a truck toy that doubles as a logic puzzle for ages 3 and up. "Stuffies" animals/pillows from martFIVE are adorable and will surely elicit lots of smiles.

Gaynes said "Imaginext Eagle Talon Castle" from Fisher-Price will thrill any little boy, and their "Fantastic Gymnastic Dora" will make any little girl's holiday.

While on the Seal of Approval site, parents can complete a questionnaire to better understand their child's personality. The extensive questionnaire was developed by psychologists to rate the personalities of children, adolescents, and adults of any age. Parents can also search through an extensive collection

of parenting articles written by experts in subjects ranging from sibling rivalry and explaining divorce to potty training and talking back.

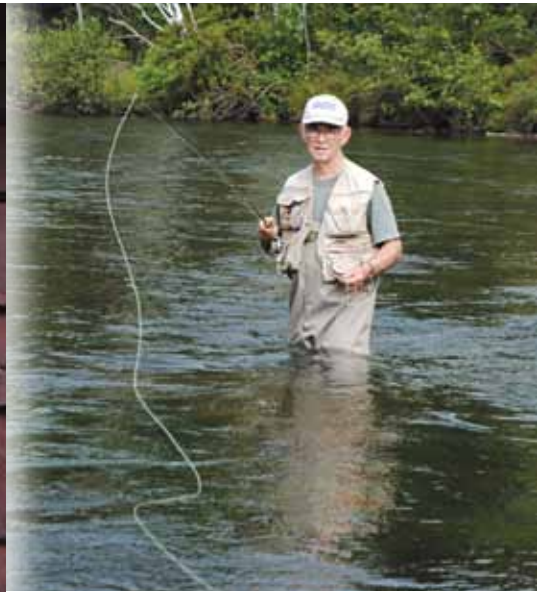
Don't forget to add a good book!

No holiday would be complete without a good book or two. Each year a committee of the Association for Library Service to Children (ALSC) identifies the best-of-the-best in children's books for readers birth through age 14.

Visit ala.org/alsc/awardsgrants/notalists/ncb to check out the 2012 Notable Children's Books list.



Linda Wacyk is a regular contributor to Country Lines magazine....and yes, a grandmother too.



Highly Prized

Bob Summers' handmade bamboo fly rods are some of the best in the world.

Ours is a mass-production society, and those of us who live in Michigan have been smack in the middle of it ever since Henry Ford first dreamed up the assembly line.

The advantages of mass production are obvious—not only are the costs of consumer goods reduced, but service and parts become readily available, too. Still, there are plenty of folks who are willing to pay more—sometimes significantly more—for unique items. That is especially true for sporting goods.

Bob Summers knows this and has made a living his whole life by providing sportsmen with something truly unique: handmade bamboo fly rods.

Summers, of Traverse City, was bitten by the fly-fishing bug as a youth, and as a teenager in 1956 took an after-school job at a Detroit fly rod shop. He hasn't stopped making fly rods since then.

After 17 years working at the company founded by the legendary Paul Young, Summers decided it was time to go out on his own. Today, he is among the best-known bamboo fly-rod builders in the world, with a customer base that extends to Europe and Asia.

Although most fly rods are now made from graphite, some aficionados prefer bamboo because of the tradition behind them. Others say simply that bamboo rods “feel more alive” than modern graphite rods.

“There's definitely a different feel,” says Summers, 74. “It's a slower action. It's heavier in your hand than a graphite rod

for the same size line, but I kind of like the feel in your hand.”

Summers compares the two rods to using a heavy hammer or a light one—in the end, both will get the job done—it's just a matter of personal preference.

“Bamboo isn't for everyone,” Summers says. “The stroke of the rod is slower. I wouldn't say it's ‘better.’ I prefer to say it's different. Some people fall in love with it right away. Some people don't. “A person's got to really fish a lot to appreciate it,” he adds.

Bamboo—also known as cane—is a tropical or semi-tropical grass with a hollow stem and woody exterior that provides both the strength and flexibility required for fly rods. It was the premier fly rod material before the advent of fiberglass (which eventually gave way to graphite) and is still highly prized by traditional fly fishermen. The best cane for fly rods is Tonkin cane, from South China, and it's the only bamboo Summers has ever used in his craft.

Summers begins the rod-building process with lengths of cane that measure anywhere from 2 to 2½ inches in diameter. He immediately splits them lengthwise—to keep them from cracking on their own—and heat-treats them over an open flame to temper the cane and give it that rich caramel color. He then cuts lengths of cane into strips (about ¼-inch wide) and machines the lengths into

60-degree triangles that taper lengthwise. The strips are glued together into a six-sided section of rod. The lengths of rod are filed smooth, steel-wooled and varnished, at least twice.

Summers typically makes two-piece rods—a butt and a tip—and fabricates all of his own hardware (except for the line guides)—including the reel seats and the nickel silver ferrules that join the sections. Most Summers rods come with two tips, so the angler has a spare should he break it, though he says some of his customers prefer to buy a rod with just one tip so they can put the money they save toward another rod.

“There's no one rod that does everything best,” Summers explains. “You use different rods if you're fishing for 8-inch brook trout than you do if you're fishing for steelhead. You've got to have a couple of rods—at least.”

Summers rods aren't cheap. Prices begin at around \$2,100 for a two-tip set, but they are apparently worth the investment; used Summers rods are starting to show up as collectibles, fetching far more than Summers charges for a new one.

“You've got to feel alright about that,” he says. “I'm not getting a big head about it, but it's better than them not being collectibles.”

If you're thinking about a Summers rod for your angling sweetheart for Christmas, you're probably out of luck. These rods are in such demand that there's a waiting list to buy one. But if you order one now, you can have it by next Christmas.

Visit rwsummers.com to learn more about Bob Summers and the rods he makes.



Grandma's
Lemon
Squares

Take-along **DISHES**

From salads to main dishes and desserts, these recipes are sure to be a hit at your next event.

Grandma's Lemon Squares

- 2 c. flour
- 1/2 c. powdered sugar
- 1 c. butter, melted
- 4 eggs, beaten
- 2 c. granulated sugar
- 4 T. flour
- 1/2 t. baking powder
- 1/3 c. lemon juice

powdered sugar to sprinkle on top

Preheat oven to 350°. Mix flour, powdered sugar, and butter together. Press into greased and floured 9x13-inch pan. Bake 20 to 25 minutes. Combine the rest of the ingredients and pour over the bottom crust. Bake 20 to 25 minutes more. Cool and sprinkle with powdered sugar.

Jenn Seif, Shelbyville

Enchilada Stuffed Shells

- 15 uncooked jumbo pasta shells
- 1 lb. lean ground beef
- 1 10-oz. can enchilada sauce
- 1/2 t. dried minced onion
- 1/4 t. dried basil
- 1/3 t. dried oregano
- 1/4 t. ground cumin
- 1/2 c. fat free refried beans
- 1 c. reduced fat cheddar cheese, shredded

Cook pasta according to package directions; drain and rinse in cold water. In a non-stick skillet, cook beef over medium heat until no

longer pink; drain. Stir in enchilada sauce and seasonings; set aside. Place a rounded teaspoon of refried beans in each pasta shell, then fill with beef mixture. Place in 11x7x2-inch baking dish coated with cooking spray. Cover and bake at 350° for 25 minutes. Uncover; sprinkle with cheese. Bake 5 minutes or until cheese is melted. Makes 5 servings.

Sandy Amenson, Interlochen

Sweet Potatoes with Apple and Cranberries

- 4 lbs. orange-fleshed sweet potatoes, peeled and thinly sliced in rounds
- 4 Granny Smith apples, peeled, cored and thinly sliced in rings
- 1 c. sweetened, dried cranberries
- 1 1/3 c. clover honey
- 1/3 c. frozen orange juice concentrate
- 1 c. apple cider or unsweetened apple juice
- 3/4 c. chopped pecans
- 3/4 t. fine sea salt or regular salt

Butter a 9x13-inch glass baking dish. Arrange half of the potato slices in four overlapping rows in dish; place half the apple slices over the potatoes in the same fashion. Sprinkle with a third of the cranberries. Repeat with a layer of potatoes and apples. Tuck remaining cranberries in gaps between apple slices. Sprinkle with pecans. In a saucepan over very low heat, combine honey, orange juice concentrate, apple juice and salt; cook and

stir until honey dissolves. Pour mixture over potatoes and apples. Cover with foil and bake at 350° for 45 minutes. Uncover and bake 15 minutes longer, or until potatoes are tender. Serves 12 to 16.

Marilyn Partington Frame, Traverse City

Picnic Potato Salad

- 3 1/2 lbs. red-skin potatoes, peeled and cut into 3/4-inch pieces
- 3 T. white wine vinegar
- 2 hard boiled eggs, chopped
- 1/2 c. chopped onion
- 1/2 c. chopped celery
- 1/3 c. chopped italian parsley
- 3/4 c. mayonnaise
- 3/4 c. sour cream
- 4 t. dijon mustard

Cook potatoes in large pot of boiling salted water just until tender, about 12 minutes; drain and transfer to a large bowl. Drizzle vinegar over hot potatoes and cool to room temperature. Mix eggs, onion, celery and parsley into potatoes. Whisk together mayonnaise, sour cream and mustard; mix into potato mixture. Season with salt and pepper. This can be made one day ahead. Cover and refrigerate. Serves 6.

Paula Brousseau, Bellaire

Ham & Cheese Poppyseed Melt

- 2 T. dried minced onions
- 1 T. dijon mustard
- 1 t. poppy seeds
- 1/2 c. butter, melted
- 1 dozen (1 pkg.) King Hawaiian Sweet Rolls
- 1/2 lb. sliced deli ham
- thinly sliced swiss cheese

Preheat oven to 325°. In a small mixing bowl, stir together onions, mustard, poppy seeds and melted butter. Leaving the dinner rolls intact, slice them open so that you have one solid top and bottom. Place bottom half on sprayed baking sheet or pan; place ham slices to cover the rolls. Top this with slices of cheese. Place the top part of the rolls on the ham and cheese. Drizzle the slightly cooled butter mixture evenly over the rolls. Cover with foil and bake for 20 minutes. Use a knife to separate the rolls into individual sandwiches.

Jean Alexander, East Jordan

Ranch Beans

- 1 lb. hamburger
- 1 onion, chopped
- 1 lb. bacon, fried and crumbled
- 1 can kidney beans, drained
- 1 can butter beans, drained
- 1 can pork and beans, undrained

1/4 c. ketchup

2 T. molasses

1/2 c. brown sugar

1/2 c. white sugar

Cook hamburger and onion together. Drain. Add fried bacon, then rest of ingredients. Mix well. Put into 3-quart baking dish. Bake 1 hour at 350°. Can also make in crock pot.

Bonnie Gauld, Fife Lake

Quick Taco Salad

4 c. shredded iceberg lettuce

1 c. tomatoes, diced

1/4 c. green peppers, diced

1 c. ground beef

1 packet taco seasoning mix

1 c. taco cheese, shredded

1 c. nacho Dorito chips, crushed

thousand island dressing (to taste)

Place lettuce, tomatoes and peppers into a large bowl. Cook ground beef over medium heat and add taco seasoning as directed on package. Once cooled, add to salad. Toss with thousand island dressing. Add crushed Dorito chips just before serving.

Danielle Cochran, Grayling

Pumpkin Cheese Dip

1 pie pumpkin

1 bar of hot pepper Monterey jack cheese

croutons, any flavor

1/4 c. milk

2 T. butter

Cut off top of pumpkin and scoop out seeds and pulp. Cut cheese into cubes and layer cheese and croutons in pumpkin until full. Pack down and add milk and butter. Place top on pumpkin and place on a cookie sheet. Bake at 250° for a couple hours until it all melts.

Serve straight out of the pumpkin with cut up vegetables and crackers. This is also easily made ahead, refrigerated and baked later. It's a perfect recipe for fall.

Marianne Murphy, Kalkaska

Chocolate Raspberry Streusel Squares

1 1/2 c. flour

1 1/2 c. oats

1/2 c. sugar

1/2 c. brown sugar, packed

1 t. baking powder

1/4 t. salt

1 c. butter

1 c. raspberry jam

1 c. chocolate chips

1/4 c. chopped almonds

Preheat oven to 375°. Combine flour, oats, sugar, brown sugar, baking powder, and salt. Cut-in butter until mixture is crumbly. Set aside 1 cup of mixture to use for streusel. Press remaining mixture into the bottom of an ungreased 9-inch-square pan and bake for 10 minutes. Spread jam over crust; sprinkle evenly with chocolate chips. Combine reserved oat mixture with almonds and sprinkle over chocolate chips. Bake for 30 to 35 minutes or until golden brown. Cool completely before cutting into squares.

Jenn Seif, Shelbyville

Pina Colada Pie

1/3 c. butter or margarine, melted

1/4 c. sugar

1 1/4 c. crushed graham crackers, about 18 crackers

1 8-oz. can crushed pineapple, with juice

1/3 c. sour cream

1 small package vanilla instant pudding

1 8-oz. Cool Whip, thawed

1 3-oz. package cream cheese, softened

1 t. vanilla

1 c. shredded coconut

Stir butter, sugar and crackers together. Press into pan and bake at 350° for 4-5 minutes, or until edges are lightly browned. Set aside to cool. In a bowl, mix pineapple and sour cream with dry pudding mix. Add cream

cheese and mix well. Add coconut, vanilla and Cool Whip (save a couple tablespoons of graham cracker crumbs, Cool Whip and coconut for garnish). Pour mixture into pie crust. Garnish gently with reserved graham cracker crumbs, Cool Whip and coconut. Cover and refrigerate for a couple of hours before serving.

Dave Richards

Ham and Cheese Melts

1 package puff pastry

1/2 lb. sliced ham

6 slices Kraft American or cheddar cheese

4 slices provolone cheese

salt and pepper

Thaw puff pastry for 2 hours before using. Preheat oven to 400°. Spray a large cookie sheet with nonstick spray. Take one sheet of puff pastry and unroll onto cookie sheet. Lay Kraft cheese on puff pastry, leaving a 1-inch border around the puff pastry (so the cheese doesn't leak out of the pastry). Layer the ham over the Kraft cheese, then layer the provolone cheese over the ham. The last layer is the second sheet of puff pastry. Crimp the 1-inch edges with a fork. Make three 2-inch slits on the top layer of the puff pastry. Sprinkle with salt and pepper. Cook for 20-25 minutes or until golden brown. Cut into a total of 9 pieces.

Danielle Cochran, Grayling



Enchilada Stuffed Shells

Take-along Tips:

- If invited to bring food to a potluck or party, bring a dish that's enough for roughly 12 servings.
- If bringing a cake or cupcakes, coat the plastic wrap with nonstick cooking spray. The frosting will arrive intact.
- If your dish has a sauce on the side, provide paper or foil muffin cups. The guests can put the condiment in the cup so it doesn't run all over their plate.
- Bring your own serving ware, such as a large serving utensil, and expect that you may lose it. Put a piece of tape with your name on any dishes.

SUBMIT YOUR RECIPE! Contributors whose recipes we have printed in 2012 will be entered in a drawing to win a prize: *Country Lines* paying their January 2013 electric bill (up to \$200)! The 2012 winner will be announced in the Jan. 2013 issue.

Thanks to all who sent in recipes! Upcoming: Please send in **CHOCOLATE** recipes by Nov. 10 and **BRUNCH** recipes by Dec. 10. Mail to: *Country Lines Recipes*, 2859 W. Jolly Rd., Okemos, MI 48864; or email recipes@countrylines.com.

Photography by: 831 Creative

The Way of the Lotus

New protective coatings developed for power lines may guard your cell phone, too.

Imagine dropping your cell phone into a swimming pool—and then, after a panicked retrieval, finding it's completely dry and works just fine.

This scenario is now entirely possible thanks to recent developments in water-repellent coatings known as superhydrophobics. Once applied, these coatings make a surface not only water resistant (like a Gore-Tex-treated raincoat), but completely untouchable by liquids. The potential is astounding.

“Practical application of this technology will save electric consumers millions of dollars in repair costs by protecting equipment that is vulnerable to liquids, like ice,” asserts Tom Lovas, technical liaison and contractor with the Cooperative Research Network (CRN), the research and development arm of the National Rural Electric Cooperative Association.

Bio-inspiration

Scientists refer to superhydrophobics as the “lotus effect.” Revered by many Far East cultures for its purity, the aquatic lotus plant boasts large, round leaves covered in hairy micro- and nanoscopic protrusions. These protrusions instantly repel liquids (such as raindrops) by forcing them outward at a 150- to 180-degree angle.

In essence, that force allows air to enter between the leaf and the droplets, keeping water from ever actually touching the leaf. In fact, if you were to immerse an aquatic lotus into a tank of water, the foliage would appear coated in shimmering translucent silver because air is trapped between the water and the leaf's surface.

“Just like lotus leaves, synthetic superhydrophobic coatings make surfaces virtually ‘unwetterable,’” Lovas states. “Manufacturers are quickly finding ways to put the products to use.”

For electric utilities, Dr. John Simpson, a pioneering researcher at the U.S. Department of Energy's Oak Ridge National Laboratory, has developed a glass-based coating that he says could be applied to power lines and other outdoor electrical equipment. Simpson's powder creates a microscopic air layer between the coated material and any water



Surfaces coated with a superhydrophobic spray make them virtually “unwetterable.” That means coated power lines would repel freezing rain, preventing damaging ice from forming.



When freezing rain accumulates on electric lines, they become extremely heavy, often breaking and toppling support poles, which leads to power outages.

on the surface so that, just like a lotus leaf, the material stays dry even if totally submerged in water.

In a simulation test conducted in an environmental chamber at the lab, Simpson sprayed cables in freezing water and found that only a small ridge of ice accumulated, which easily vanished with a quick tap. “In the real world, vibration from power flow plus movement from wind would continually knock any ice off,” Simpson points out.

Built-in Cleaning Service

There's another feature of superhydrophobics that mimics the lotus leaf: “self-cleaning.” The lotus leaf's continual movement—caused by wind, rain, waves or passing animals—drags away dust particles, fungus or other potentially harmful contaminants. Similarly, Simpson's coating allows power lines and attached devices to repel water droplets that, in turn, carry away salt and other elements contributing to deterioration.

“Every winter, ice and freezing rain cause



Lines treated with a superhydrophobic coating repel liquids and prevent major ice accumulation. Any ice that might sit on the lines would be easily blown off by wind or vibration from the power flow.

power lines to snap and equipment to short out,” Lovas remarks. “And in coastal areas, sea spray coats distribution and transmission equipment with corrosive salt. These harsh conditions cost electric utilities, and consequently consumers, millions of dollars every year in equipment damages. A superhydrophobic coating could prevent these problems and improve service reliability.”

If his formula proves effective in practical applications, Simpson estimates that losses to large transmission lines could be reduced by 40 to 90 percent—saving individual electric co-ops hundreds of thousands of dollars annually.

In partnership with researchers at Georgia Institute of Technology, CRN has been field-testing its own superhydrophobic coating. “Superhydrophobics are a prime focus for our research because part of our job is to create solutions for electric co-ops,” Lovas explains. “Ice and corrosion continue to be very expensive concerns. We hope to change all that.”

—Angela Perez

Stay Charged

Home battery energy storage systems are a convenient alternative or supplement for emergency generators. But consumers should be careful with selection and installation should only be done by a licensed electrician.

In their simplest form, these systems are larger versions of uninterruptible power supplies sold to back up home computers. Because of the expense to power an entire household during an outage—especially one with a heat pump or central air conditioning—a battery energy storage unit usually connects to an isolated “subpanel.” The subpanel then allows power from the batteries to flow to identify critical loads, such as refrigerators, well pumps, home security systems, computers, and TVs. With the popularity of residential solar panels and small wind turbines increasing, some companies are also combining these “backyard” renewable power systems with interactive battery storage setups.

When the power goes out, battery energy storage systems automatically provide generation for appliances connected to the subpanel

as long as stored energy lasts. The amount of stored energy available depends on the unit size and what you are trying to power. For example, if you buy a unit that has 11 kilowatt hours (kWh) available and use that to run an Energy Star® refrigerator that uses less than 1.5 kWh per day, the refrigerator would run for about a week. If you also run a TV, lights and small appliances, you could expect about eight hours of uninterrupted power. But if you turn on the air conditioner or stove to cook a meal, you could run out of power in roughly two hours. (If your storage unit, however, is also connected to a solar panel, then it would recharge during the day, potentially giving you continuous limited backup.)

Compared to natural gas and propane generators, battery sets have the advantage of being quiet, extremely reliable, and have no fuel cost or storage requirements.

Drawbacks include less capacity (unless connected to a solar panel) and a hefty price



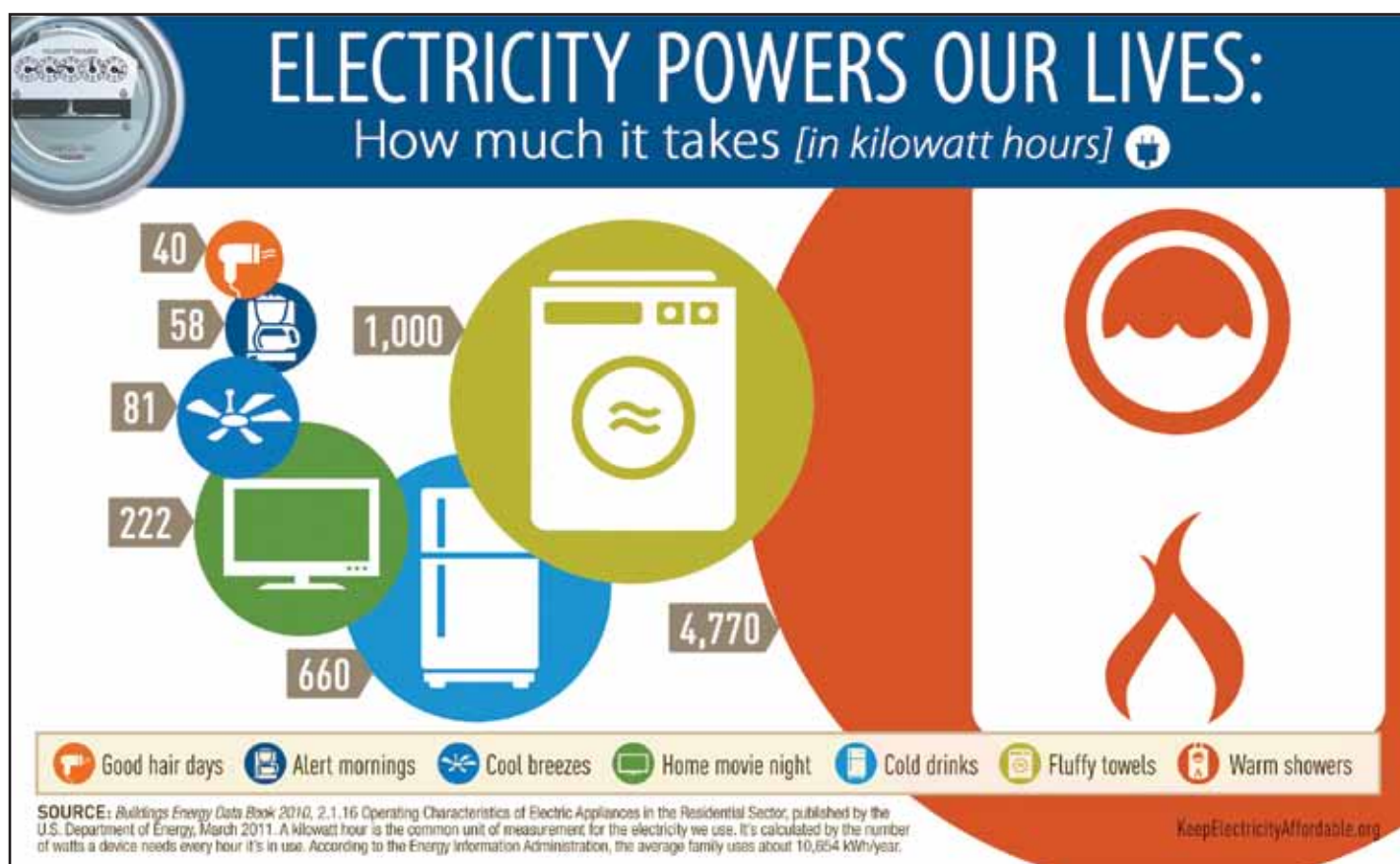
Home battery backup units (shown without a cover) are about the size of a refrigerator and generally fit in basements or spare rooms.

tag—up to 10 times the cost of an emergency generator. Prices vary, depending on the electrical output and unit storage capacity.

Two popular manufacturers that provide price quotes upon request are Silent Power (silentpwr.com) and Sunverge (sunverge.com). When considering battery energy storage, select a unit that meets Underwriters Laboratories (UL®) standards and have it installed by a licensed electrician who can assist with local electrical permitting and inspection requirements, which vary widely. Like emergency generators that run on gasoline, diesel fuel or natural gas, adequate ventilation is important because even “sealed” batteries can give off harmful gases if something goes wrong with the charging process.

If you are considering a battery energy storage unit or have a renewable energy system you want to integrate with battery backup, be sure to contact your electric co-op beforehand to ensure the system is approved and will be hooked up correctly. In many cases, you will need to sign an interconnection agreement with your co-op before the device can be put in.

—Douglas Danley



Shrubs

New Varieties!

Back in the old days, like when cars had “fins,” shrubs were just something you used in the yard to fill in space. The rather plain-looking “bushes” as we called them, were planted in rows in our yard, mostly to stop baseballs and such from going into the neighbor’s yard.

Today, there are more shrub varieties than flavors of ice cream at Disney World—exciting ones too! The new varieties have names like “Handsome Devil Viburnum,” and “Happy Face Potentilla,” names that fit their appearance. These show-stopping varieties come in a variety of colors to contrast or

bloom most of the season. For early flowering, choose from a number of new varieties of long-blooming azaleas from the “Bloom-a-thon” series.

Shrubs with Nice Foliage

If our landscapes were all flowering plants it would be a riot of color, but too much for the eye to take in and the flowering plants wouldn’t stand out as well. So, let’s take a look at a few shrubs planted for their foliage. They range in color from green, yellow-green, blue-green, and even burgundy. The plants below are available at most garden centers

and they shouldn’t be, especially some of the new gems. The “Sunjoy” series will really add a bold look to your landscape. “Sunjoy Cinnamon” is a deep burgundy color and “Sunjoy Syrah” is a full-bodied shrub with black-red foliage. Plants with white or yellow flowers will really pop when grown alongside these shrubs.

Planting Shrubs

Hirvela suggests paying close attention to how large and wide your shrubs will be at maturity and make your selections accordingly. Shrubs are pretty easy to grow if you buy ones that are hardy for your area. In general, plant in well-drained, fairly rich soil. If you have really poor soil, dig a hole three times the size of the root ball and fill it in with good topsoil or aged compost. Plant them at the depth they grew in the nursery container; then water around the root ball prior to filling in the hole.

A slow-release fertilizer applied in spring will keep them healthy and looking good. A



‘Oso Happy Smoothie’ hardy rose



‘Spice Girl’ viburnum



‘Sonic Bloom Pearl’ wegeila



‘Let’s Dance Big Easy’ hydrangea

complement other plants in your yard.

“It’s an exciting time to be a gardener,” says Stacey Hirvela, marketing specialist at Spring Meadow Nursery/Proven Winners Color Choice Shrubs in Grand Haven. And, there are some truly amazing varieties of shrubs on the horizon that bear the Proven Winners logo, she says. Wegeila is an example. If you like the flowers that this shrub bears, you’ll really like the “Sonic Bloom” series, a new hybrid that reblooms for a longer season of color. These come in red and white.

Other varieties that will surely cause a stir for the next few years include “Oso Happy Smoothie,” a thornless, hardy rose for Michigan; “Let’s Dance Big Easy” hydrangea, a fragrant viburnum called “Spice Girl,” and a compact variety of forsythia, “Show-off Sugar Baby.” And there are more! “Happy Face” white potentilla will surely put a smile on your face as it is both showy, hardy, and

around the state. Pay attention to the hardiness zone of each one; the plants rated to zone 4 will do better in the state’s colder locations.

“Celtic Pride” or “Siberian Cypress” is a new variety of cypress that would have been nice to have in my garden this past summer. It’s a drought-tolerant, very hardy plant that will provide a good alternative to juniper, Hirvela says. It won’t get too tall either, growing to only 3 feet.

Arborvitae is still a standard in many landscapes, and there is quite a variety to choose from now. Make sure you research these well before purchasing so that you choose the appropriate height and spread for your landscape. Some arborvitae, such as “Emerald,” are tall specimens and work well near tall buildings. Arborvitae, which is actually a domesticated cedar, comes in different shades of green-yellow-gold.

Barberry bushes are sometimes overlooked,

couple more tips: water well the first summer after planting and apply a 4-inch layer of wood bark mulch to hold in water and discourage weeds.

“Shrubs are one of the best ways to invest in your garden,” Hirvela says. “You get a lot for your money, they form the backbone of a garden.” They fill in spaces well and keep your interest even into the fall and winter months, she adds.

Visit provenwinners.com and use the Proven Winners’ garden center locator to find these new varieties. Not all garden centers will have them, so call ahead to check or ask if they can order them for you.

Neil Moran offers garden tips on his website: northcountrygardening.neilmoran.com.



Soundproof for Peace, Quiet, Efficiency

Q: *Our house walls need more insulation for efficiency and perhaps better soundproofing. We are also planning to add a bedroom. Will insulation make the existing rooms quieter and the new room more soundproof?*

A: Adding wall insulation can be an expensive project and above the skill level of most do-it-yourselfers. In many older houses, particularly ones with masonry wall, there is little space inside the walls for additional insulation. In many cases, it's worthwhile to spend more on insulation with the highest R-value per inch, which is a number showing the ability of insulation to resist the transfer of heat. Higher R-values indicate more effective insulation.

Any type of insulation you add to save energy will help somewhat to soundproof the walls, but you need additional improvements for significant noise-dampening.

For a new room addition, carefully installing fiberglass batt insulation boosts your home's energy efficiency. The key word is "carefully" because fiberglass batts don't provide protection from gaps at the wall joists—it's up to you to make sure you caulk or use spray foam in the spaces before insulating. Every unfilled crack and gap reduces the overall efficiency of the new wall.

Another option is to build a second insulated wall against the inside existing wall.

You'll lose only about four inches of floor space, which you can frame with 2 x 4-foot pieces of lumber, insulate with foil- or kraft paper-faced fiberglass batts, and then cover with drywall. This is particularly effective for older houses with full masonry walls.

Installing new windows makes the greatest improvement in saving energy and blocking outdoor noise. Most new windows also use heavy inert gases in the gap between the panes that further reduces sound transmission.

Also, simply caulking and weather stripping your old windows can have a dramatic effect on reducing noise, and it improves the energy efficiency of your house. In turn, your heating and cooling system won't need to use as much energy.

When planning a new bedroom, do some research regarding the STC (sound transmission class) rating for various types of wall construction. A typical uninsulated interior wall with drywall on each side of 2-by-4 framing has an STC of about 34.

If there are common heating ducts and holes for electrical outlets and phone jacks, the STC of that interior wall may be only 25. These

openings are also culprits for drafty rooms, so using an inexpensive outlet insulation kit is one more way to improve energy efficiency. Adding insulation inside the wall increases the STC by very little—normal conversation would still be easily heard. At the other extreme, with an STC of 66, yelling is barely audible in adjacent rooms.

Your first step in soundproofing interior walls is to get out the caulk gun and seal any gaps in the walls and at joints. It won't help energy efficiency much, but it does block the vibrations that create sound.

If it's normal household sounds and voices, many standard soundproofing methods are effective. If you want to block deep bass vibrations from music or a home theater, a thicker wall is best. You can create that by installing two layers of drywall or using a high-density wallboard. If using drywall, you can nail them tightly together or leave them slightly separated for the benefits of decoupling.

Decoupling the two surfaces of a wall is critical to block sound transmission. That means drywall on one side is not attached to the same wall studs as the drywall on the adjacent wall. One simple method is to install a second layer of drywall over the existing one. Make sure not to screw it into the wall studs or very tightly to the existing drywall so it stays decoupled. This method also increases the thickness of the wall for blocking bass vibrations.

Another method is to stagger the studs on wider headers and footers in the wall cavity. The drywall on each wall is attached to every other stud, so there is no direct path for the sound to travel.

The following companies offer soundproofing products:

Acoustic Sciences

800-272-8823 • asc-soundproof.com

Certainteed

800-782-8777 • certainteed.com

Homasote

800-257-9491 • homasote.com

Owens Corning

800-438-7465 • owenscorning.com

Serious Energy

800-797-8159 • quietrock.com

If you have a question for Jim, please email jdulley@countrylines.com, or mail to James Dulley, Michigan Country Lines, 2859 W. Jolly Rd., Okemos, MI 48864. Be sure to let us know which electric co-op you receive service from.

Visit dulley.com for more home improvement and do-it-yourself tips.

Statement of Ownership, Management and Circulation

(Required by U.S.C. 3685) 1. Publication Title: Michigan Country Lines. 2. Publication No.: 591-710, 3. Filing date: 10/1/12. 4. Issue frequency: monthly, except August and December. 5. No. of issues published annually: 10. Annual subscription price: \$6. Complete mailing address of known office of publication: Michigan Electric Cooperative Association, 2859 W. Jolly Rd., Okemos, MI 48864. 8. Complete mailing address of headquarters or general business office of publisher: 2859 W. Jolly Rd., Okemos, MI 48864. 9. Full names and complete mailing address of publisher, editor, and associate editor: Craig Borr, Gail A. Knudtson, Douglas Snitgen, 2859 W. Jolly Rd., Okemos, MI 48864. 10. Owner: Michigan Electric Cooperative Assoc., 2859 W. Jolly Rd., Okemos, MI 48864. 11. Known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities: None. 12. Tax status: Has not been changed. 14. Issue date for circulation data below: Sept. 2012 15. Extent and nature of circulation:

	Avg # of copies each issue during preceding 12 mo.	Actual # of copies of single issues published nearest to filing date
A) Total No. of copies.....	210,692	271,603
B) 1) Paid and requested circulation	208,063	268,203
C) Total paid and requested circulation	208,063	268,203
D) 1) Free distribution by mail.....	573	483
4) Free distribution outside mail.....	2,056	2,917
E) Total free distribution	2,883	3,400
F) Total distribution.....	210,692	271,603
G) Copies not distributed.....	0	0
H) Total.....	210,692	271,603
I) Percent paid and/or requested circ.....	98%	98%

16. Publication of statement of ownership: November 2012

17. Signature and title of editor: Gail Knudtson

Are All Fires the Same?

Where there's smoke, there's fire. And while all blazes may look similar, they should not be treated equally. The Federal Emergency Management Agency (FEMA) notes that over 26,000 electrical home fires result in property damage, injuries, and even death every year. To help you stay safe, remember the acronym F.I.R.E.:

F ind the source before it starts.

Old or faulty wiring is often the main cause of electrical fires. Heat from the wiring or an overloaded system can provide the strike that leads to a fire, but there are often warning signs before a fire even starts.

I nvestigate the signs.

Flickering lights, recurring trips in a circuit breaker, a telltale sizzling noise around wiring and hot light switches may indicate a fire hazard, and it's now time to call a qualified electrician.

R emedy the problem.

If you find any signs of a pending fire or have worries about old wiring, again, contact a professional electrician, but there are some precautions you can take, as well:

- Use bulbs of the correct wattage to prevent overheating of lamps and other fixtures.
- Do not use appliances in wet areas.
- Check all appliances routinely for damage or overheating.
- Check extension and other cords for fraying, cracks or cuts.

E xit the building and learn to extinguish properly.

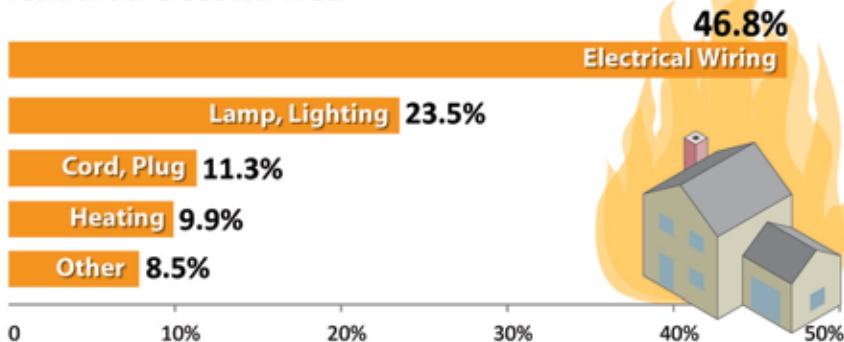
If you are faced with an electrical fire, have everyone exit the building, and call 911 immediately. If you must face a small fire, know the proper way to approach it.

- Never use water on an electrical fire. Water conducts electricity, so it will not douse the fire and may lead to electrocution.
- If the circuit breaker does not trip in the area on fire, shut off the main breaker, if possible. Be sure to approach the breaker only if the fire is not nearby and your hands are dry.
- Never use a Class A extinguisher on an electrical fire. Use a Class C or multi-purpose ABC model. If there is no extinguisher available or the class is unknown, baking soda may help smother the flames.

— Sources: U.S. Fire Administration, Electrical Safety Foundation International

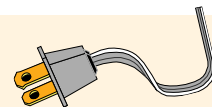
Electrical Fire Culprits

About 26,000 household electrical fires occur in the U.S. every year. Following are the top five pieces of equipment that ignite residential electrical fires.



Source: U.S. Fire Administration National Fire Incident Reporting System; Residential Building Electrical Fires Volume 8, Issue 2; 2010 USFA Fire Estimate Summary

Stay Warm Safely



Space heaters and electric blankets can keep you cozy, but they can be fire and safety hazards, too. Stay both warm and safe with these additional tips.

Use heating correctly:

- ▲ Make sure space heaters are in good repair and lab-certified (CSA®, UL® or ETL).
- ▲ Do not use an extension cord to power a space heater. Make sure the circuit can handle the heater's power demands and any other appliances plugged into it.
- ▲ Keep space heaters 3 feet away or more from flammables (drapes, papers, upholstery), and out of reach from kids and pets.
- ▲ Never use heaters as drying racks.
- ▲ Space heaters should have an automatic shut-off in the event they tip over.
- ▲ If the heater runs on fuels like gas, kerosene or wood, follow manufacturer instructions carefully. Make sure carbon monoxide detectors are installed, and keep chimneys and flues free from corrosion or blockages.
- ▲ Make sure electric blankets are undamaged. Do not put anything on top of it (including pets) or tuck it under a mattress.

Use electrical cords properly:

- ▲ Avoid using damaged extension cords or running any cords through walls, under rugs or furniture, or across doorways.
- ▲ Do not overload outlets or extension cords. If a cord feels warm, it could be a fire or shock hazard.
- ▲ Never try to repair a damaged extension cord with electrical tape.
- ▲ Never cut off the ground pin to connect a 3-prong appliance cord to a 2-wire extension cord or receptacle. Instead, use a national lab-certified (CSA, UL, etc.) adapter.
- ▲ Replace older extension cords if one of the prongs is not "polarized" (wider than the other).
- ▲ Avoid placing cords where someone can accidentally pull them down or trip.
- ▲ Cover unused outlets on the extension cord to prevent kids from getting a shock.
- ▲ Before buying any extension cord, check that it's lab-certified.
- ▲ Outdoors, only use extension cords and appliances approved for such use.
- ▲ Select the right cord. Larger appliances and power tools use cords with three prongs.

Energy Efficiency Rebates Help Holiday Budget

This is a great time of year for shopping deals, and the same goes for energy efficient appliances and equipment. As a member of Ontonagon County REA, you can receive cash-back incentives through their Energy Optimization (EO) program.

Residential Rebates

Since 1992, ENERGY STAR has been the gold standard for reliable, high-quality energy efficient products, and its label is found on over 60 categories. Your electric co-op offers rebates on the items listed here, with details and forms available at michigan-energy.org.

Not only will you receive a convenient energy efficiency rebate, but you will continue to save energy for years to come and feel more comfortable in your home well after your holiday guests leave.

Commercial & Industrial Options

There are savings opportunities for business owners, too. Energy use is the largest operating cost in commercial buildings, potentially

representing 33 percent of an operating budget. Reducing the amount of energy a business uses has significant financial and other benefits.

With the EO program, your small business, farm or industrial facility can take affordable energy efficiency measures.

These rebates include:

- Light bulbs and fixture replacements, \$8 to \$50 per item.
- Low-energy livestock waterer, \$50.
- Variable frequency drives on pump or fan motors, \$60 per horsepower.
- Circulation or exhaust fans, \$2 per blade-inch.
- Milkhouse electric water heater, \$250 per unit.

Custom Projects

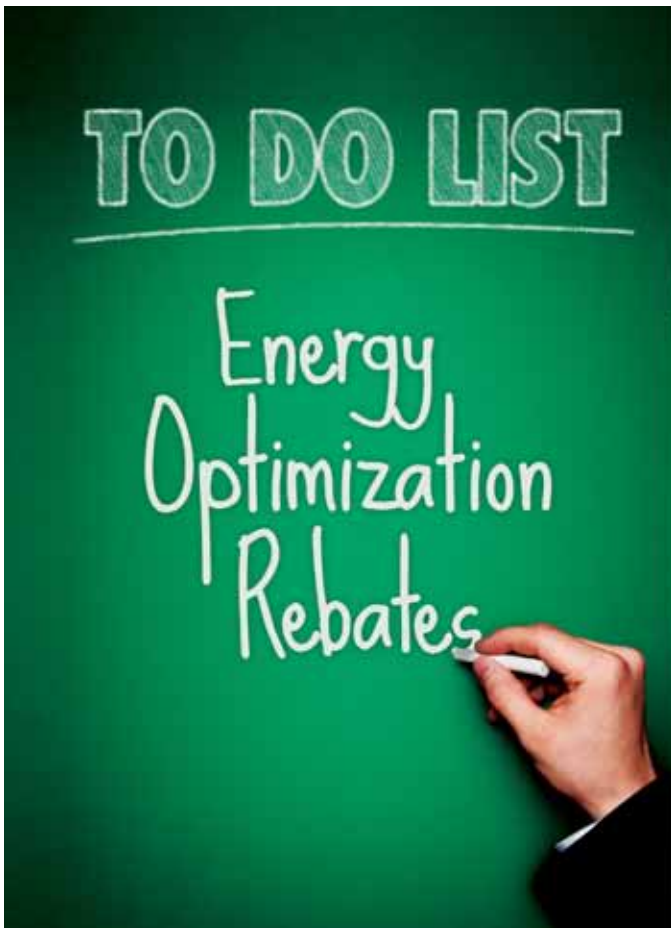
You can also work with program engineers

on customized energy-related projects to suit your unique business needs. Visit michigan-energy.org or call 877-296-4319 for help in getting started. Up to 40 percent of your total project cost may be covered.

Act now. Save now.

Before 2012 closes, read about all of your electric co-op's EO programs. And, you don't have to camp-out or brave a crowded mall to take advantage of them.

Sample Energy Efficiency Products	Rebate
Compact Fluorescent (CFL) Lightbulbs	<i>In-store discounts</i>
LED Lightbulbs	\$10
ENERGY STAR Ceiling Fan (w/light kit)	\$15
ENERGY STAR CFL Fixture	\$15
ENERGY STAR LED Fixture or Downlight kit	\$20
Smart Power Strip	\$20
ENERGY STAR Room Air Conditioner	\$20
ENERGY STAR Dehumidifier	\$20
CEE Tier 2 or 3 Electric Clothes Washer	\$50
Electric Clothes Dryer (w/moisture sensor)	\$25
CEE Tier 1 Dishwasher	\$25
ENERGY STAR Refrigerator	\$20
Low Flow Aerator Kits	\$10





ACT NOW

There are REBATES with your name on them.

There is still time to save! Our Energy Optimization programs help businesses and residents save energy. **Cash-back rebates** are available for ENERGY STAR® appliances, efficient farm equipment, lighting replacements and more. Your to-do list: 1) View rebates online. 2) Decide what energy-saving actions to take. 3) Claim your savings.

ENERGY TIP: You can get 30% energy savings per year with ENERGY STAR.

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.

Promises, Promises

The wind blows often on our country acre just outside Mason. It gathers speed over the open field to our west and rises over an incline to attack us full force. Mostly it's just a nuisance, but sometimes it blows so hard it makes being outside uncomfortable.

I once thought this would be the perfect location for a windmill. That was the early '80s, when, like now, there was big interest in the promise of free energy. I looked into it, but it would've taken 20 years of reduced electric bills to pay off the cost of a system—and that's assuming the equipment would never require maintenance.

There are few things in this world that are

It's good to look for additional energy sources; finding them has helped civilization prosper. But over the years they have succeeded or failed by virtue of their economic sense, and without being imbedded in a government constitution.

Since you're reading this magazine, you already know about the "25 by 25" ballot Proposal 3 (pages 12-13).

No other state has such a mandate, and it seems a step too far. It's like putting in the constitution that one-quarter of the food grocery stores sell, and every shopper eats, must be organic. That would satisfy organic farmers and grocers, since they would make

thorough analysis and debate can give our elected representatives something to do. Freezing a mandate in the constitution, without the flexibility to respond to changing market conditions, would put Michigan at a disadvantage.

Another reason is that wind is a fickle worker. It doesn't blow all the time, and can't be relied upon when you need it most. As we see more wind turbines in Michigan, we will also see more gas-fired electric generation plants to back up those wind turbines when the wind isn't blowing, which is about three-quarters of the time. That's an expense Proposal 3 proponents don't acknowledge.

Proponents also suggest that it will foster jobs—sure, but probably no more than the jobs lost by replacing other types of generation, and many will be temporary. They say it will make Michigan a leader in the renewables industry and keep it competitive with other states, but other states don't have to comply with a costly constitutional mandate. They say it will keep more of the money we spend on energy in the state. But what if other states enacted similar policies about our cars or the products of our growing renewables industry? It's a harmful economic policy for Michigan and a myopic view of the world.

We don't dictate in the constitution what people eat, and it shouldn't be used to dictate where we get our energy. I agree we should move ahead on renewable energy as fast as we can, for all kinds of health and environmental reasons—but in the marketplace, not the constitution. Given the pace of improvements in technology, it's entirely possible that we could reach 25 percent renewable energy in 13 years, but it should be on a path that is free to respond to market forces.

The promise of renewable energy is real, the promises of Proposal 3 proponents are as uncertain as the wind. I'm voting No on 3.

“As we see more wind turbines in Michigan, we will also see more gas-fired electric generation plants to back up those wind turbines when the wind isn't blowing, which is about three-quarters of the time. That's an expense proponents of Proposal 3 don't acknowledge.”

as charged with false promise as free energy. Whenever energy costs spike, gadget hawkers make promises. There's the gizmo that attaches to your car's fuel system to double your mileage, the magic juice you pour in the gas tank, the space heater that cuts heating bills, the secret contraption that was hijacked by the oil and car companies to preserve their monopolies. (Oh, the fantastic things you can find on the internet!)

A few years after ditching the windmill idea, I became intrigued by geothermal heat pumps. (Also called geexchange, these systems use electricity to move heat from the earth to your home. It also works in reverse. It produces up to five times the heat you get from the same amount of electricity used in a resistance heater. And, it's not magic—it's practical and it works.) We had one installed in our 1944 Cape Cod-style home in 1989. Out went the gas furnace and wood stove. In was cleaner air and more comfortable heating and air conditioning. Our energy bills went down, paying for the system cost in just under eight years.

money on the deal, but it would impose a cost on consumers they may not be able, or wish, to pay.

So, I looked up the definition of constitution: “a body of fundamental principles or established precedents according to which a state or other organization is acknowledged to be governed.”

I don't think Proposal 3 is a fundamental principle, and I don't think we want to make it a precedent.

Utilities in the state currently operate under a renewable portfolio standard of 10 percent by 2015, based on a law passed in 2008. I watched negotiations for that legislation. It was a tough, lengthy process. No one got everything they wanted. But the result was fair, progressive, flexible and doable. By all accounts, the renewable mandate will be met by your co-op and other utilities.

But it's not cheap, and, come 2015, after all the data from this experiment is digested, we'll have a better idea of how we should move to the next goal. The place for that determination is in the Legislature, where

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



Installing Statewide
YEAR ROUND!

Designer METAL ROOFING!

Can we use your home
in our ads?

Extra Savings Available.*

Call for details:

888-221-1869

Place your
home here!

FINANCING Available
As Low As \$232/Month**

**SHOWCASE
HOMES
Wanted!**

*We would like to use your home to showcase a beautiful American Metal Roof. Qualified homes can earn big discounts off the price of an American. Call today to see if your home qualifies. Call Jenn at:

1-888-221-1869

Note: Not all homes will qualify.



American Metal Roofs
Made in America



Rustic Shingle in Aluminum

See our Photo Gallery and Watch the Snow Sliding Video at
www.AmericanMetalRoofs.com

Visit the American Metal Roofs Showrooms at

6140 Taylor Dr, Flint, MI 48507 and 1875 Lansing Rd, Charlotte, MI 48813

888-221-1869

Find us on Facebook
fb.me/AMRmichigan



**Promotion may not be combined with any other offers. Some restrictions apply. Call for details. Promotion is based on approved credit. Applies to purchases made on American Metal Roofs consumer credit program. \$232 monthly payment calculations based on a \$20,000 unsecured loan at 7% APR for 10 years.

MI Contractor License #2102158513



Ontonagon County Rural
Electrification Association



Michigan Electric Cooperatives Oppose Proposal 3

Your electric co-op supports a clean, affordable and reliable energy future, and we're already working towards achieving Michigan's 10 percent renewable energy requirement by 2015. That's why we oppose Proposal 3, which would lock a 25 percent renewable energy standard into the state constitution, costing Michigan families and small businesses an additional \$12 billion.

**We urge co-op members to vote NO
on this costly ballot proposal.**

Visit CAREforMich.com to learn more.

