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4 Service, Value And Fair Rates

5 Rate Changes

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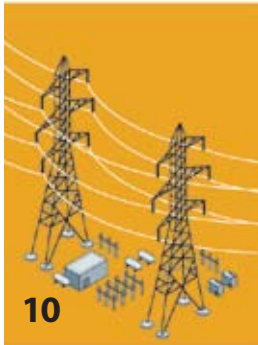
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MICHIGAN *Country Lines*



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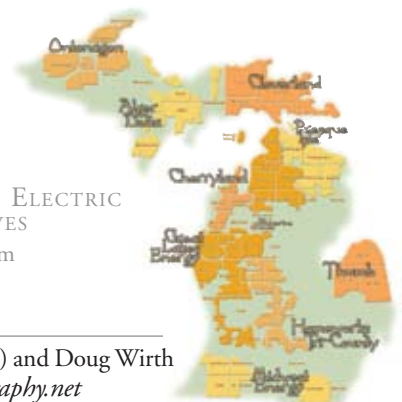
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MICHIGAN'S ELECTRIC
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C O V E R *

A quilt block design that graces the Centennial Farm barn of Melanie (pictured) and Doug Wirth is part of the Osceola County Quilt Trail. *Photo—Andree Magsig, drephotography.net*

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Delivering Service and Value with Fair Rates

As an electric co-op, we set our rates with one purpose in mind: to collect only the amount of revenue necessary to deliver the service and value you deserve. This involves making rates as fair and equitable as possible for all members.

It's a big challenge because what is fair to one member may not seem that way to another. There are two main components to each member's bill: the energy usage (kWh) and monthly/quarterly charge. Adjustments in each of these charges can affect residential members differently. Typically, that's because each member's kilowatt-hour consumption differs from house to house.

The energy usage charge, or cost-per-kilowatt hour, should cover only the variable cost of service related to purchasing energy from our power supplier. In reality, it also helps pay for fixed costs involved in the normal operation of this business. These are costs that must be paid regardless of the amount of energy each member uses. Ideally, these fixed costs should be covered completely by the monthly/quarterly charge and be the same for each member regardless of the amount of electricity used each month. Lineworkers who battle the weather to keep your lights on, courteous reps who answer your billing questions, and the poles and wires that bring power to your home are just a few examples of what these fixed expenses cover.

Making Things Equal

The comfort and convenience electricity brings to our lives would not be possible without a billing mechanism to cover these fixed costs. We are working to make this mechanism more equal for our residential members (see related story, page 5).

As announced in previous columns, there will be a rate restructuring for permanent and non-permanent residential members, starting Jan. 1, 2011. This means an increase in the monthly/quarterly charge will be offset by a corresponding decrease in the energy usage charge. These rate changes were approved by the Michigan Public

Service Commission in August.

How will this rate adjustment make our rates more fair? Currently, residential members who use more energy pay a greater share of the fixed costs than those who use less. Our actual fixed costs for each residential member are about \$30 monthly, yet some members with low energy use may have monthly bills below \$30. When the monthly/quarterly charge is too low, members with low energy use are unfairly subsidized by members with high energy use.

Ideally, every residential member would pay a \$30 monthly charge (or \$90 quarterly) so that the energy usage charge would no longer have to cover part of the fixed costs. Our energy usage charge would be a more attractive rate if it was based strictly on energy purchases from our power supplier and did not include part of the fixed costs, too.

The monthly/quarterly charge can be compared to your phone or cable bill in that you pay a fixed cost each month regardless of how many times you use the service. Increasing the monthly charge from \$12 to \$15 per month (\$36 to \$45 quarterly) gets us closer to a more equitable rate structure for all residential members. Electric utilities across the state and nation are making similar adjustments to their monthly charges.

Capital Credits Refund Coming

For Great Lakes Energy, it's especially important that we seek fairness in our rate structure. We're a co-op, which means our consumers are also members and owners of this business. We're not motivated by profit. But when we do earn a profit, it's shared with members through a capital credit refund program. We have been retiring capital credits annually since 2003. In that time, over \$17.7 million in capital credit refunds were returned to members. We plan to return them again at the end of this year.

Capital credit refunds and reliability improvements that help reduce average outage times are key reasons why Great Lakes Energy is a well-run business that is looking out for you.



Steve Boeckman
Great Lakes Energy
President/CEO

Residential Rate Changes Approved

Residential rate changes for Great Lakes Energy members were approved by the Michigan Public Service Commission in August.

Here is a summary of the changes:

Effective Aug. 31, 2010, the energy usage charge for permanent residential members was increased from 9.735 to 9.981 cents per kilowatt-hour (kWh). The rate for seasonal residential members increased from 13.859 to 16.659 cents/kWh. The additional revenue, over \$4.1 million, collected from this rate increase will fund more reliability improvements and help maintain adequate margins.

In addition, a rate restructuring adjustment will take effect Jan. 1, 2011, and involves two changes:

1. The energy usage charge for permanent residents will decrease from 9.981 to 9.590 cents/kWh and for seasonal residential accounts it will decrease from 16.659 to

15.066 cents/kWh.

2. The monthly charge for residential accounts will increase from \$12 to \$15 per month and the quarterly charge for seasonal residential accounts will increase from \$36 to \$45 per quarter.

The rate restructuring that goes into effect on Jan. 1, 2011, won't affect the total amount of revenue collected by the cooperative. It is "revenue neutral" because it shifts part of the increase from the energy usage charge to the monthly/quarterly charge.

The shift between the two charges is a step toward a fairer rate structure that is occurring with many electric utilities in Michigan and across the country.

An increase in the outdoor lighting service rate is also part of the original rate

increase request.

The revenue from the rate increase will allow the cooperative to continue investing heavily in its electric distribution system. The cooperative continues to make progress in improving reliability on a system where about 60 percent of the power lines are at least 40 years old.

Great Lakes Energy Residential Rate Changes Summary:

Permanent Residential

Rates effective 8/31/10

\$12 monthly charge
9.981 cents/kWh

Rates effective 1/1/11

\$15 monthly charge
9.590 cents/kWh plus new PSCR factor yet to be determined

Non-permanent Residential (seasonal)

Rates effective 8/31/10

\$36 quarterly charge
16.659 cents/kWh

Rates effective 1/1/11

\$45 quarterly charge
15.066 cents/kWh plus new PSCR factor yet to be determined



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Co-ops Encouraged to Emphasize Communication with Members

Directors, managers and employees need to tighten their bond with co-op members in order to help them ride out the current firestorm of uncertainty about electricity costs and other challenges, NRECA CEO Glenn English told about 900 participants at the Regions 1 and 4 meeting, Sept. 8-9.

Speaking at the Amway Grand Plaza in Grand Rapids, English said co-op officials must improve communications with members and demonstrate that they are doing everything in their power to hold down monthly bills. Otherwise, higher bills and other contentious issues could trigger a backlash of member anger toward elected directors and co-op staffers at a time when

unity is sorely needed.

"If you build trust before the firestorm, it's just like putting money in the bank," English explained. "You'll need as much as you can, because when the firestorm hits, you'll spend it." Because they'll be the main target, he advised the co-op leaders to "use this time to reduce your co-op as a firestorm target."

This storm, he said, will last longer and affect 70 to 80 percent of the fuel co-ops use, so "we need 100 percent participation from you ... and it's a good use of member dollars to communicate on this issue. The membership has to feel that each and every director, each and every manager, and each and every co-op employee

is truly representing them and looking after their interests."

The government push to regulate coal, nuclear and natural gas generation sources means higher consumer bills, which are already showing up in some member mailboxes. Members will be angry at staff and directors for rate increases, and some co-ops have already lost managers, English said. "We need to retain experienced managers and directors to keep the trauma and cost down and make wise decisions." Co-ops can avoid these disasters by talking openly about issues to minimize the impact and by not ignoring problems.

Challenges facing co-ops will also look different in 2011, with new Congressional faces and maybe a different party, meaning that co-op leaders will have to get acquainted with new people and will gain and lose some friends, he said.

"The real issue is the electric bill and the intensity of members' concern about this—talk about it instead of ignoring it," English ended.

At the meeting, the following Michigan co-op directors also achieved recognition for completing advanced director education. Earning the Board Leadership Certificate were Melinda Lautner (Cherryland), Tamara Gady (Cloverland), Paul Byl and Susan Scott (Great Lakes Energy), and Carl Morton of HomeWorks. Ed Oplinger (HomeWorks) and Jon Zickert (Cherryland) earned the Credentialed Cooperative Director certificate.

The Michigan Electric Cooperative Association hosted the event that drew 76 people from nine Michigan co-ops. Other states in Region 4 include Indiana, Ohio and West Virginia. Region 1 members include Delaware, Maine, Maryland, New Jersey, New Hampshire, New York, North Carolina, Pennsylvania, Virginia and Vermont.



© iStockphoto.com/Darman Garcia

Wind Better

It seems the general tone of your article ["Wind and Basic Math," Sept. 2010] is negative. I'd like to counter a little.

Small, residential-sized (2- to 10-kilowatt as you suggest) wind systems, when properly sited, work very well and can easily produce 100 percent of a household's electric needs. The key is energy consciousness by the homeowners and efficiency. My wife and I have powered our all-electric home (except hot water) 100 percent-plus using a 2.5 kW wind turbine. We are not even in an ideal wind site—annual average wind speed at our hub height (126 feet) is 10.5 mph. The key is proper siting using best practices known by qualified site assessors and installers.

Sure, installing a quality wind system isn't cheap, but electric rates will likely only rise. And yes, regular maintenance is required that costs a small percentage of system cost, as well. But, saving money isn't the only reason to install a renewable energy system. Let's think about the long-term benefits of cleaner

Recycled Paper

Michigan Country Lines is now printed on recycled paper from FutureMark Paper, which taps the "urban forest" of waste paper thrown out in Chicago every day. Using recycled paper reduces the carbon emitted in paper production, the paper deposited in landfills, and water and air pollution. The energy to produce recycled paper is about one-half the amount required to make paper from pulp.

High-Definition Television Comparison Guide

The power used by an active television is determined by three factors: screen size; technology type, such as plasma or LCD; and picture brightness, which nearly always depends on user-selected picture settings.

Type of TV	Typical Size	Typical Price	Average Energy Used
Liquid Crystal Display (LCD)	13-65 inches	\$200 to \$8,000	111 watts (standard)
			101 watts (LED)

LCDs are the most popular HDTVs, mainly because they're flat and available in a tremendous range of sizes and prices.

Plasma	42-65 inches	\$800 to \$7,000	301 watts
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Available in a limited range of sizes (mostly big), plasma TVs outperform LCDs in tests comparing overall picture quality.

Rear-projection	50-73 inches	\$1,000 to \$3,500	N/A
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Rear-projection TVs are the most efficient but are getting hard to find because flat-panel models are often cheaper.

Source: CNET.com (April 2010)

Energy Efficiency *quick tip*

In general, TV energy consumption goes up as the picture quality gets better and the screen gets bigger.

air and resulting reduced health issues, less destruction of landscape to mining fossil fuels, *not* having to transport fossil fuels to power plants. Distributed electric generation has many benefits, including not having to build more power plants. Isn't this actually good for the utilities?

Yes, wind is not for everyone, and as you suggest, potential buyers should "get the facts" first and not allow themselves to be talked into wind by an un reputable salesperson. Let's face it, solar PV is better for those in urban areas. Either way, we need to change our mindset and dependence on fossil fuels. Wind is surely not the only answer, but it can play a key role in a more healthy, environmentally responsible, sustainable future. We should be encouraging energy consciousness and efficiency first. Only then will renewable energy sources, wind or otherwise, work well for more people.

*Sam Simonetta, Deerton
Alger Delta Co-op member*

Mustang Memories

I would like to thank all the people at *Country Lines* for the article written about our "Mustangs." A special "thank you" to Linda Kotzian for her special handling and follow-up to make this article as great as it is.

I have gotten over 20 telephone calls and emails from friends, neighbors and past fellow employees I worked with at Ford. Besides talking about the article, just about all remarked on the uplifting spirit this article gave to them in a "poor" economy!

Thank you again, Good job Linda Kotzian. Great

magazine, *Michigan Country Lines*; keep it up.

Pat & Ellie Broderick

This article is so special to our family. To be able to have my father recognized in such a manner for what he has loved and enjoyed doing for so many years is awesome! It's been a Broderick family legacy (Mustangs) and reading it in *Country Lines* magazine... What can I say besides how proud I feel and how much I love my dad! Thank you for yet another great memory!

Jacqueline Broderick

More Blueberry Heroes

We have had a much warmer summer and in many areas rain has been ample, creating a good growing season for both cultivated and wild crops. Wild blueberry season is over in the U.P., and we have confirmed that the bears did not get all the berries. Recently, I saw my Wild Blueberry Hero, so I thought I should report in for 2010. [countrylines.com/2009/11/10/my-blueberry-hero]

Mr. K is 88 this year and he does not move as well and can not stand as long as he used to. Despite this, he was able to pick 251 ½ quarts—48 percent more than last year! Mr. K attributes his greater production to the weather and his new, smaller, light weight chair.

This year's production was used for blueberry pies for Mr. K's 101st Airborne Lunch Bunch and for a pancake breakfast at Mr. K's Finnish Club to honor Mr. Koskima's grandson, Matthew, who recently was killed by an IED in Afghanistan.

Charles Day, Lambertville

The Big Cheese Challenge

Move over Wisconsin, here comes Michigan cheese.

The 11 members of the new Michigan Cheese Makers Co-op hope to gain a foothold in the cheese market.

Co-op members will work together to market their products, leverage buying power, and help each other.

The Michigan State University Product Center for Agricultural and Natural Resources pulled the co-op together to "bring visibility to the fantastic cheeses made in the state by creameries using Michigan milk and artisanal techniques," says Matt Birbeck, supply chain specialist and counselor liaison for the Product Center.

Funded by a grant through the U.S. Department of Agriculture's (USDA) Rural Cooperative Development, the new co-op will help its members market their artisanal cheeses to food stores in the state.

"A co-op like this is very important in a state like Michigan that is not known, like Wisconsin, for its cheese. The possibilities are endless," explains Jim Turner, state USDA director.

Forming a co-op is in line with the Product Center's goals, says director Chris Peterson. "Each of the members has a unique product," he says. "And that's a wonderful thing. However, having your own unique product maximizes the workload when it comes to marketing, and it's difficult for one producer to develop a portfolio of products. By marketing these together, members now have a portfolio of products which make them much more attractive to a grocery supplier."

In fact, Meijer representatives have announced that the company plans to join. "We're interested in becoming an associate member of the co-op because half of our 190 stores are in Michigan," states Meijer CEO

Mark Murray. "These are spectacular small businesses [and] great products."



Photo - Leelanau Cheese Company

John [above] and Anne Hoyt, of Leelanau Cheese Company in Suttons Bay, see other benefits to their newly-formed co-op. "It's hard to do things yourself, there's more power as a team," Anne says. "We can share new ideas, new cheeses and recipes." They are also Cherryland Electric Co-op members.

For a new cheesemaker like Barbara Jenniks, of Cowslip Creamery in Grand Rapids, building camaraderie and a helpful spirit is key. "It's important to small cheesemakers like me, because we're all in this together," she says. "If we all make good products, there's room for all of us."

Four co-op members have been recognized for their cheeses, including Cowslip, Leelanau Cheese Company, Zimmerman's Creamery of Ann Arbor and Greenbush Farms of St. Johns.

"The fact that we have this many award-winning cheeses in Michigan is good because it tells the consumer that this is a good product," Peterson says. Although the co-op is small, he says it has a good spread across Michigan, and has the Lower Peninsula covered.

"They better watch out, we're on the way," Jenniks warns Wisconsin cheesemakers.

See GreatLakesGreatCheese.com for a list of cheesemakers and productcenter.msu.edu to find out about MSU's Product Center.

COMING UP: ▶ Favorite recipes: **SAUSAGE** by Dec. 10 and **BUDGET-FRIENDLY** by Jan. 10.

Mail to: Recipe Editor, *Country Lines*, 2859 W. Jolly Road, Okemos, MI 48864, or email jhansen@countrylines.com

Pay at Any of Eight Offices

Pay your electric bill at any GLE office Monday through Friday. Drop boxes are available for after-hours payments at all locations.

- ▶ **Boyne City:** 1323 Boyne Avenue, 8 a.m.–5 p.m.
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- ▶ **Kalkaska:** 630 Magnum Road, 7:30 a.m.–4 p.m.
- ▶ **Newaygo:*** One Cooperative Center Drive, 8 a.m.–5 p.m.
- ▶ **Reed City:** 4493 200th Avenue, 8 a.m.–5 p.m.
- ▶ **Scottville:*** 525 W. US-10, 8 a.m. - 5 p.m.
- ▶ **Waters:** 10380 Great Lakes Dr., 7:30 a.m.–4 p.m., (closed for lunch noon - 12:30 p.m.)
- ▶ **Wayland:** 1049 133rd Ave., 7:30 a.m.–4 p.m., (closed for lunch 12:30–1 p.m.)

Current bills can also be paid at any of our pay stations. Past-due bills must be paid at a Great Lakes Energy office or by phone. Please contact our office, 888-485-2537, or visit our website, gtlakes.com, for a list of pay stations and other payment options. Office hours are subject to change.

* Drive-up window available.



Track Your Energy Use Online

Great Lakes Energy is looking out for you with a feature on our website that will help you track your electricity use.

You can access your daily meter readings online by visiting gtlakes.com and clicking on "Account Login" at the top of the home page. Enter your user name and password to log-in or click "Sign Up" if you are a first-time user. Click on "Detail," next to the billing balance amount on the "Account Summary" page. Click again on either "Daily Usage" or "Monthly Usage" near the top of the "Account Detail" page.

You can also contact our office for your readings and daily consumption if you don't have internet service.

Recycle CFLs at Great Lakes Energy



Recycle your used compact fluorescent lightbulbs (CFLs) at your local Great Lakes Energy service center.

Great Lakes Energy is looking out for you and has installed a COMPAK Recycling Center in the lobbies of all eight service centers. Simply place your CFLs in the environmentally-secure containers. The co-op will

ship them to Next Level for Recycling, Inc. (NLR), which disposes of waste products quickly and properly.

With more than 14 years of universal waste experience, NLR provides containers with InnerPak liners and vapor lock lids to guard against environmental breach. CFLs help you save energy.

Your Bill Has Been Redesigned!

Your Great Lakes Energy electric bill has a new, cleaner look that makes billing data easier to find. A new bar graph offers a quick summary of your kilowatt-hour use for the last 13 months.

Bills with larger print are also available for co-op members who are visually impaired. Please contact us at 888-485-2537 if you would like to take advantage of this new feature.

Keep that bill as low as possible, too, by participating in one of our Energy Optimization programs that offer special energy-efficiency incentives for your home and business.

Visit gtlakes.com to learn more about our programs and how to pay your bill online, too. At Great Lakes Energy, we're looking out for you.

Receive Country Lines While You're Away

Continue to receive your *Michigan Country Lines* magazine even if you're away from home.

Simply contact us if you plan to be away for more than a month and give us the address where you would like the magazine sent. Contact us again when you return.

Dial 888-485-2537 or visit the member services section of our website at gtlakes.com, found under "Your Home," and then click on "Change of Address Request."

In Your Best Interest

Observing National Co-op Month in October gives us yet another reason to tell our members that you are part of something special. More than 40,000 cooperative businesses serve more than 120 million people nationwide. From agriculture cooperatives in the Midwest, housing cooperatives in New York City, credit unions, and telephone and electric cooperatives throughout the country, service to the membership is the mission of each and every one. Just like these other cooperative organizations, your electric cooperative was formed to deliver a service, in this case electric service, on a not-for-profit basis, with local ownership and direct accountability.

Every day, electric cooperatives demonstrate their service and the benefits of cooperative ownership. At the top of the list is providing reliable electric power at the lowest possible cost. Year-in and year-out, your cooperative meets or exceeds the service reliability standards established

by the Michigan Public Service Commission. Service also means helping consumers manage their electric bills through Energy Optimization programs, being good stewards of the environment, and looking for workable solutions to address climate change.

Your cooperative has been in the energy efficiency business from day one. When cooperatives strung the first lines to serve rural America, they immediately started educating their new members on the wise and safe use of electricity. Many cooperatives also sold electric appliances in communities where no other options to buy existed. Today your cooperative is heavily involved in promoting energy efficiency (Energy Optimization) programs as required by Michigan law.

At a time of increasing national concern about the economy, especially rising energy costs, we also must communicate the cooperative difference to decision makers, whose actions affect our members and the communities in which they live and work. We have been to Washington, D.C., over the last year meeting with our members of Congress to discuss legislation affecting our ability to maintain reliable, affordable electric energy. We have discussed proposed legislation addressing climate change issues, Environmental Protection Agency (EPA) regulation, a national renewable energy mandate, Clean Air Act regulation, the Rural Utility Service loan program, a national energy efficiency mandate, and a host of other proposals. Oftentimes, we find our mission is to simply educate our members of Congress on the impact of various proposals on your electric rates.

We are faced with an issue right now of



Michael Peters is president and CEO of the Michigan Electric Cooperative Association. His email address is mpeters@countrylines.com.

having the EPA begin regulating the emissions of greenhouse gases (GHGs), such as carbon dioxide from power plants, under the Clean Air Act, due to Congress' failure to pass legislation addressing the issue. As it stands now, Congress still has time to consider a bill proposed by Sen. Rockefeller (D-WV) that would put a moratorium on the EPA's regulation of GHGs for two years, thereby giving Congress time to act. We support this proposal and will be telling our members of Congress to, as well. We believe

this is good public policy.

The cooperative difference defines who we are and what we can achieve as we look out for our members' best interests.



GRID Lines

Utilities prepare to repave America's electric highway. **Megan McKoy-Noe**

Imagine a major highway with vehicles all going one way. It's rush hour—rows of impatient cars try to merge, pushing to reach a final destination. Exits for cities appear, and a steady stream of cars spreads into the countryside.

Electricity today travels across the nation in much the same way—moving from power plants along major transmission arteries until off-ramps deliver it to a local electric cooperative and, finally, your home.

There's a national push to improve this setup—repave the electric highway, so to speak—to allow for two-way traffic of information. This would be accomplished by two steps: upgrading the physical network of poles and wires to bolster reliability and security, and deploying digital “smart grid” technologies that allow utility staff and equipment on power lines and substations to talk to each other. The ultimate goal: allow electric systems to operate at top efficiency and help consumers make better energy choices to keep bills affordable.

“Modernizing America's electric system is a substantial undertaking,” stated the U.S. Department of Energy (DOE) in its report, *Grid 2030*. “The nation's aging electromechanical electric grid cannot keep pace with innovations in the digital information and telecommunications network. America needs an electric superhighway to support our information superhighway.”

Earth's Largest Interconnected Machine

A challenge lies before utilities: how to transform a largely mechanical power network into a digital smart grid.

North America's electric grid may be the largest interconnected machine on earth, consisting of power plants, high-voltage transmission lines, smaller transmission lines, substations, and distribution facilities. But it wasn't built with a master plan in mind. It was created as needed, one section at a time. As the nation's electric needs grew, so did the grid.

Today, the electric grid is split into three parts: the Western Interconnection, which reaches from the Pacific to the Rockies; the Eastern Interconnection, which continues to the Atlantic; and the Texas Interconnection, which covers most of the Lone Star State. Plans are under way in Clovis, NM, to connect all three segments, but today they remain fairly isolated.

The grid includes about 3,000 utilities and other entities operating 10,000 power plants, according to DOE. Over 1 million megawatts of energy courses over 300,000 miles of transmission lines nationally. Most of this vast network was designed at least 50 years ago—thus the need for a major upgrade.

Grid of the Future

What will tomorrow's grid look like? Paving a new, smarter grid calls for unprecedented cooperation and communication, since everyone has a different idea of what our future power network should be. Electric cooperatives believe there should be three main goals behind grid improvements: affordability, efficiency and reliability.

To keep electric bills affordable, a smarter grid will provide tools to help members manage their electric use, while automation devices and tools help reduce operational costs. And since electric co-ops are nonprofit, any money saved on daily operations will ultimately be returned to members.

Technology focused on boosting efficiency could shrink a community's carbon footprint by letting members reduce their electric use during demand peaks and lowering line losses. Finally, a smarter grid should be more secure and can help electric co-ops restore service following an outage much faster and safer than before. While it will still take the same amount of time to remove a tree that's fallen onto distribution lines, a utility would be able to pinpoint that location remotely rather than walking a line to find the problem.

As with all construction projects, these

The Grid:

 **3,000** Utilities
10,000 Power Plants
300,000 Miles of Transmission Lines

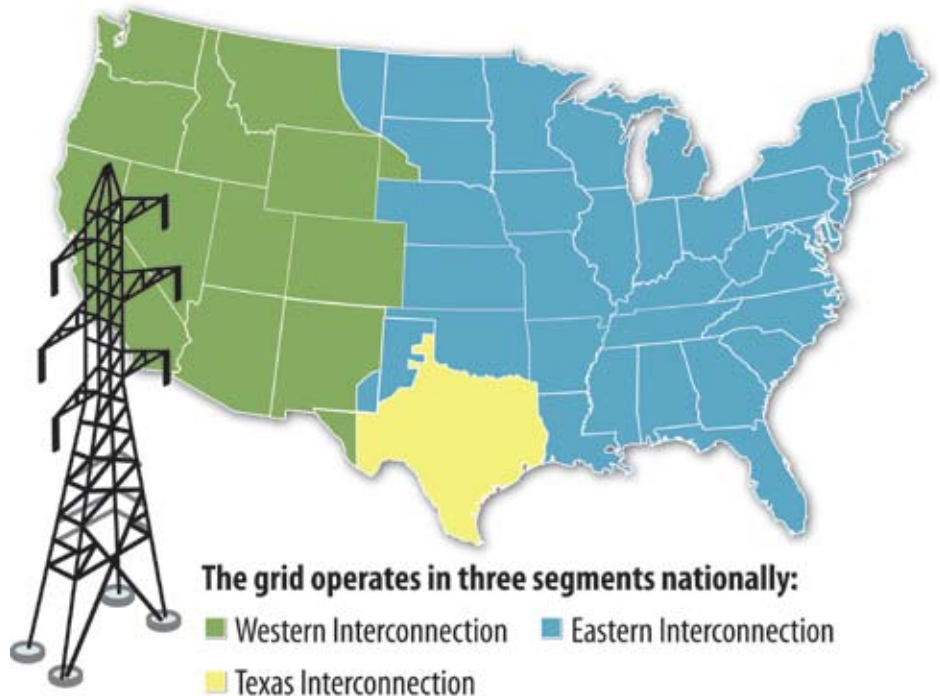
Illustration by Funnel, Inc., NRECA

improvements will require study to make sure consumer benefits outweigh costs.

Electric cooperatives, as consumer-owned and governed utilities, take a sensible approach to technology investments. This means the co-op business model, combined with DOE research funds, makes cooperatives an excellent test bed for exploring the smart grid's value for their members and how these new technologies might be able to help keep bills affordable.

To learn more, visit smartgrid.gov. For updates on how electric co-ops are leading the way with smart grid innovations, visit ECT.Coop.

Megan McKoy-Noe, CCC writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association, the Arlington, Va.-based service arm of the nation's 900-plus consumer-owned, not-for-profit electric cooperatives.



The Cooperative Difference

Every October since 1930, not-for-profit cooperatives of all stripes have celebrated Cooperative Month. During this time, it makes sense to highlight the qualities that make electric cooperatives different from other types of utilities and businesses.

For starters, electric co-ops are owned by those they serve. That's why those who receive electric service from us are called members, not customers. Without members, there would be no local electric co-op.

Members maintain democratic control of our co-op, which means every annual meeting they elect fellow members to represent them on the board of directors. As a bonus, co-op members receive special benefits through programs, such as

Energy Optimization, the Co-op Connections® Card, and *Michigan Country Lines* magazine. We also return margins ("profits") to our members in the form of capital credits.

One principle that sets us apart from other businesses is our concern for community. As a cooperative, we have a special responsibility to support the areas in which our members live and work. From sponsoring a local school's baseball team to supporting new jobs and industry through our economic development efforts,

we stand as a driving force in our community.

Of course, co-ops span all industries, including credit unions, dairy operations, health care, housing, and much more. There are more than 29,000 co-ops across the nation. And not all are small or rural. Just look at nationally

known co-ops like Sunkist®, Ace Hardware®, and Land O' Lakes®.

Overall, co-ops are more accessible than other types of businesses. We give our members a voice, and we are local—living and

working alongside those we serve. That's the cooperative difference.

**LOCAL.
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YOU.™**



Trail of Quilts

Driving Michigan's quilt trails offers beautiful scenery and small towns and events to browse. **Gail Knudtson**



Elsie Vredenburg is a professional quilt maker ("Designs by Elsie") and coordinator of the Osceola Quilt Trail. She's pictured with her great-granddaughter in front of the "Osceola Star" block she designed.

A graceful trail of quilt block designs can be found in the small-town fabric of Alcona, Grand Traverse and Osceola counties. Painted on barns and buildings, they are part of a National Quilt Trail project aimed at preserving the buildings, as well as the art, heritage and well-being of their communities.

Osceola's Quilt Trail was started by professional quilt maker Elsie Vredenburg, of Tustin, after she met the National Quilt Trail organizer, Donna Sue Groves, at a quilt show. Groves started the Trail in Ohio in 2001 by keeping a promise to her mother, a master quilter, to paint a quilt block on her barn.

Today, the National Trail meanders through 27 states, including Iowa, Wisconsin, Illinois, Kentucky and North Carolina, which has the highest number of sites.

Oceana's Trail has nearly 31 blocks installed on 28 sites, and Elsie says more are planned for 2011. The "Osceola Star" that she designed and is mounted on her garage, was the county's first.

Most of the work gets done through volunteers and donations, Elsie explains, which in Osceola is a committee of seven people, with two that do most of the quilt block painting at the Osceola League of Arts &

■ **OCT. 9** – "Quilt Trail Color Tour" – 1-2:30 p.m.; Osceola League for Arts & Humanities; 231-734-9900 ■ **NOV. 1 thru DEC. 22** – "Christmas Gift Shop" – 207 N. Main, Evart
■ **ANYTIME** – Find an Osceola Quilt Trail map at osceolaarts.com or call 231-825-2572



Photos-Elsie Vredenburg

Opposite page: Great Lakes Energy Co-op members Doug and Melanie Wirth own this barn (also on cover) near Ewart, and their 8x8-foot quilt block is based on a quilt made by Doug’s mother, Esther. It’s the largest on the Osceola Quilt Trail, and is called “54-40 or Fight!” It refers to the Oregon Territory’s northern latitude during the border dispute between the U.S. and Canada, and was James Polk’s 1844 presidential campaign slogan. Polk’s plan was to wage war to win the entire Territory for the U.S.

The Great Lakes Energy volunteer People Fund granted money for 13 quilt blocks.

Humanities (OLAH) studio. The OLAH group also helped Elsie grow her idea for a local quilt block trail.

Alcona County’s Quilt Trail, Michigan’s first, began as a possible way to bring tourism to that area and showcase its unique history. It has about 23 blocks, and more details are available by calling 989-724-7788, or visiting alconaquilttrail.com.

In Grand Traverse County, Google “Grand Traverse Quilt Trail” or visit the website barnsofoldmission.com to bring up several information choices.

“Each quilt block shows the personality of each homestead by the design they pick out—whether it’s a quilt made by great-great grandma, or someone else—they’re all different,” says Trail participant Melanie Wirth (cover photo).

Like any community, locals in these counties are hoping the Quilt Trail will bring tourists to help their economies. For example, the OLAH group is sponsoring a “Quilt Trail Color Tour.” They also hold a “Christmas Gift Shop,” which is a community art sale and fundraiser that last year brought 660 shoppers and 35 artists (see box, page 12).

The nice thing is, you can travel the Quilt Trail any time of year.



Above, left: This “Sunflower Wreath” block rests at Christie’s Potting Shed and Florist in Marion. The building used to be a garage, and is now used for Christie’s “Antiques and Old Stuff.” Pictured (L-R) are Fred Prielipp, Carl Patterson and Christie Patterson Prielipp.

Above: Sometimes hanging the quilt blocks is a challenge. The former owner of the Steve and Melody Yarhouse farm near Ewart was known for her wonderful flower gardens. Melody has kept the gardens blooming and chose this “Amaryllis” quilt block to symbolize that legacy.



Barn Photos - Andree Magis@rephotography.net

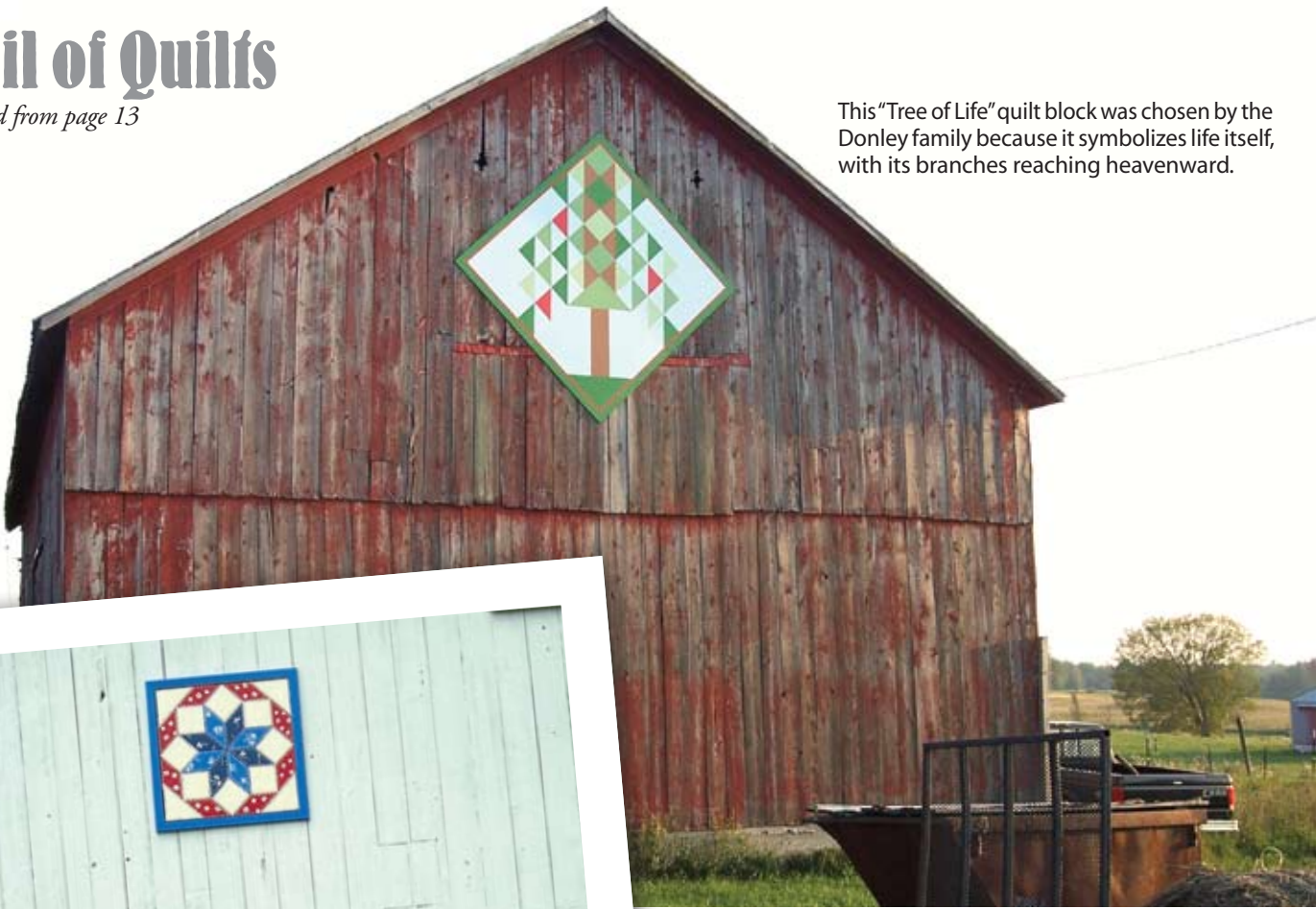
In August 2010, this variation of the “Dresden Plate” design came to rest on the hip-roof barn of Jim & Bonnie Neuman, of Marion. The barn was rebuilt with neighborly help after a fire in 1960. And, word has it that the Neumans, their children, grandchildren, great-grands, and international exchange “children” have all, in turn, found comfort under this family quilt that can always be found at the end of the couch.

more >

Trail of Quilts

continued from page 13

This "Tree of Life" quilt block was chosen by the Donley family because it symbolizes life itself, with its branches reaching heavenward.



Left: Founded in 1871, the seven-generation Hall farm is one of the earliest homesteads near Marion, MI. Homesteader Sarah McElroy Hall created the "Rolling Star" quilt which inspired this block. The family cherishes the quilt, which includes scraps from Sarah's hand-stitched dress, also pictured here.

Below, left: This "Old Glory" quilt block stands proudly on the Osceola Township Hall in Evart. The Osceola League of Arts & Humanities plans to put a quilt block on all 16 of the county's township halls.

Below: This "Star of the Orient" design is at the Centennial Farm of Jerry and Lynn Mitchell of Hersey. Lynn chose this design because it reminds her of the old windmill spinning in the breeze.



Photos - Elsie Vredenburg



Geothermal's Promise

Energy from deep in the earth has huge potential for electricity generation and heat. **Magen Howard**

Geothermal energy—created from Earth's natural heat—has been used by many cultures for thousands of years to cook and bathe. But modern technology has unlocked new ways to harness geothermal potential: producing electricity using hot water and steam locked below the surface; and heating and cooling buildings.

America leads the world in geothermal power production, with about 3,080 megawatts of capacity from more than 70 power plants, according to the Geothermal Energy Association, the national trade association for geothermal development companies. Western states boast the most geothermal energy, because it's easier to reach.

How it Works

Typical fossil fuel-burning and nuclear power plants heat water to boiling to create steam. The steam then turns a turbine, which generates electricity.

Geothermal power stations essentially cut out the middle man, piping naturally heated water (which is changed into steam) or naturally occurring steam into a plant to spin turbines. Three different types of geothermal generation exist; the choice depends on the state of the hydrothermal fluid (whether steam or water) and its temperature.

Dry steam: The first type of geothermal power plants built, these facilities use steam from a geothermal reservoir (pulled from wells) and route it directly through turbines to create electricity.

Flash steam: The most common, these plants pump water boasting temperatures greater than 360 degrees F under high pressure to generation equipment. The steam is separated from the water and used to make electricity; leftover water and condensed steam are channeled back into the reservoir.

Binary cycle: Uses moderate- to low-temperature groundwater or steam. In a binary cycle system, hot water is pumped from a well and passes through a heat exchanger, where it warms a secondary fluid boasting a lower boiling point than water. This causes the secondary fluid to flash to vapor, which in turn drives a turbine. The secondary fluid then condenses and returns to the loop system; the

water gets pumped back into the well.

Other Uses

Geothermal energy offers an array of benefits beyond electricity generation. In some cases, hot water can be piped directly into systems to heat buildings, greenhouses and fish farms. Some cities run hot water under roads and sidewalks during winter to melt snow and ice.

Geothermal heat pumps rely on the energy of the ground—the top 10 feet of the earth remains a fairly constant 50 to 60 degrees F year-round—to move heat into and out of a building, providing winter heating and summer cooling. Also called ground-source heat pumps, these appliances come in two types: an open-loop system uses well water; a closed-loop model moves a water and antifreeze solution through underground pipes to disperse heat.

While geothermal heat pumps generally operate more efficiently than their air-source cousins, they are more expensive up-front. A federal tax credit equal to 30 percent of the cost for materials and installation, with no limit on total project expenses, applies to geothermal

heat pumps through Dec. 31, 2016.

A full list of geothermal heat pump requirements, along with a product list, can be found at energystar.gov/tax-credits. To see if other rebates are available in your state, check the "Database of State Incentives for Renewables and Efficiency" at dsireusa.org.

A geothermal heat pump might not always be the best option in every situation. Contact your co-op to determine whether a geothermal heat pump is the right choice for you. Go to earthcomfort.com to find a local Michigan contractor.

Magen Howard writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association. Scott Gates contributed to this article.



Geothermal power stations go down to 6 miles deep to pipe naturally heated water (which is changed into steam), or naturally occurring steam, to a plant to spin turbines. **Inset:** One type of closed loop for a geothermal heating and cooling system.

Schools are Finding It Is Easy To Be 'Green'

Kermit the Frog might sing a happier tune after visiting our kids' schools, where "being green" is a growing trend. Green Schools across the nation are making a commitment to providing healthy, comfortable and productive learning environments while saving energy, resources and money.

In Michigan alone, more than 500 schools in 65 counties are now part of a growing Michigan Green Schools network, dedicated to protecting the air, land, water and animals of our state. They also aim to leave their mark on the world through good ecological practices and teaching environmental stewardship to our kids.

What is a Green School? Green school leaders actively take steps to improve the health and energy-efficiency of buildings, ensure science-based environmental education in the classroom, implement healthy food choices into the cafeteria, promote alternative means of transportation, and more.

"Green schools seem to make decisions differently," said Tom Abramson, Green Schools Coordinator at Delta-Schoolcraft ISD. "They are more apt to think of long-term consequences of their everyday actions."

Abramson points to Rapid River schools as an example, where among other actions staff and students have evaluated the lunch program for ways that waste can be reduced. Another school found that through recycling they could reduce their waste disposal costs while recycling valuable resources.

Going green on a larger scale by committing to green design, construction and operations for new and existing buildings can bring even greater benefits. Abramson says green school leaders in the Delta-Schoolcraft area that continuously evaluate the schools' infrastructure (heating systems, doors, windows, lights, and more) to find ways to save energy.

Some schools raise the standard even higher. Whitmore Lake, a rural community north of Ann Arbor, made a bold move to construct a green, LEED®-certified high school by

following rigorous practices endorsed by the U.S. Green Building Council. Leaders there say that extra effort improves health and efficiency and—an added benefit—attracts new families to the district.

Who gets involved? Everyone, from students to community groups, can pitch in to make schools environmentally safe and responsible.

Student "Green Club" members at Gladstone Area Public Schools, along the northern shores of Lake Michigan, have accomplished a number of environmentally friendly projects earning them recognition as Michigan Green Schools.

Back in Rapid River, students recycle and collect paper and bring it to the library. Office staff have replaced all CRT computer monitors with more energy efficient LCD monitors, and custodians are using environmentally-friendly cleaners.

"Families participate in our Girls Scouts' waste-free lunch, they recycle in their homes, our American Legion recycles paper, local church groups recycle boxes, and we even have a local metal artist that recycles all of our cans from the kitchen," said Rapid River fifth-grade teacher Beth Larson.

Some of the best green initiatives are those that involve teachers and classroom activities. Science classes find a natural connection, but other classes can put learning into environmental action as well.

Gladstone High School recently received a grant that will allow them to study and use solar energy. By partnering with Energy Works Michigan, the school will have access to lesson plans and professional development for English, math, and social studies teachers who are interested in integrating this content into their instructional planning.

What are the rewards? Schools that earn Michigan Green School designation receive tangible rewards like a signed certificate, a web banner, and a flag designating the school as an "Official Michigan Green School." Many counties hold ceremonies each

spring to recognize participating schools.

Abramson says the intangible rewards are even greater.

"It is important for schools to do this so that they can model conservation and savings to the adults of the future," said Abramson. "Lessons learned at school may carry over to homes to expand the benefits of making wise decisions."

Best of all, studies show that schools that have adopted green practices improve student test scores, reduce sick days, and raise teacher and student retention. And as the commitment to "green" principles grows, so do the benefits, which can include impressive energy cost savings.

How much savings? Experts say a green school typically uses 33 percent less energy and 32 percent less water—enough savings to hire two additional full-time teachers.

Marysville Public Schools, a suburban district northeast of Detroit, is putting those claims to the test. The district opened a new high school in 2009 that is almost 100,000 square feet larger than the old school. Yet they expect only a slight increase in energy bills because of sustainable building practices they adopted.

"If we're saving at least one teacher's job a year through our energy savings, we've made some great decisions along the way," former Marysville Superintendent John Silveri told The School Administrator.

Ultimately greening America's schools presents an extraordinary cost-effective opportunity to improve the health and educational settings for all students.

"Going green helps our schools learn to do more with less," said Larson. "It helps the kids understand what can be done to make our school and the world a better place, and that we need to practice what we preach."

michiangreenschools.us
energyworksmichigan.org
usgbc.org/k12toolkit



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Stir-fry

Stir-frying is a quick sauté over high heat. While you can stir-fry in any type of skillet, the sloping sides of a wok allow you to move ingredients away from the hot bottom while cooking. Peanut or canola oil are good choices for stir-frying. They both have a high smoke-point—the point where oil breaks down and begins to smoke. Find more recipes sent in by readers at countrylines.com.

Beef and Vegetable Stir-Fry

1 lb. beef top round steak
1 1/2 c. broccoli, cut in 1-inch pieces
3 med. carrots
1 t. salt
1 t. cornstarch
1/2 t. sugar
2 T. soy sauce
2 T. dry cooking sherry
2 T. cooking oil
1 med. onion, cut in thin wedges
1 c. frozen peas, thawed
1/2 c. water chestnuts, drained, sliced thin
1/2 c. bamboo shoots, halved lengthwise
hot cooked rice

Partially freeze beef; slice very thinly across the grain into bite-sized strips. Cook broccoli and carrots in boiling salt water for 2 minutes, covered; drain. Combine cornstarch, salt and sugar. Blend in soy sauce and cooking sherry; set aside. Preheat wok over high heat; add cooking oil. Stir-fry broccoli, carrots and onion in hot oil for 2 minutes or until crisp-tender; remove from wok. Add more oil, if necessary. Add half of the beef to wok; stir-fry 2-3 minutes until browned; remove beef. Stir-fry remaining beef 2-3 minutes. Return all meat to wok. Add peas, water chestnuts

and bamboo shoots. Stir soy mixture; add to wok. Cook and stir until thickened and bubbly. Return broccoli, carrots and onion to wok. Cover and cook 1 minute more. Serve with rice.

Kathryn Ross, Bad Axe

Virginia Yee's Dry Fried Sichuan String Beans

1/4 c. chicken broth
1 T. sugar
1 t. salt
2 T. vegetable oil
1 lb. string beans
2 T. minced fresh ginger
1/4 c. ground pork
1 T. balsamic vinegar
1 t. sesame oil
1 T. chopped scallions

(Pictured, above left)

In a bowl, combine chicken broth, sugar and salt. In a large wok, stir-fry string beans

in vegetable oil until beans look wrinkled with brown spots; remove beans to another dish. Add ginger and pork to wok and stir-fry until pork is no longer pink. Add broth mixture to wok; bring to a boil. Add cooked beans, tossing to combine and cook 2 minutes until most of the liquid evaporates. Add vinegar, sesame oil and scallions; toss to combine, remove from heat and serve at room temperature.

Jennifer Van Wingen, Lake Ann

Chicken Cherryaki Stir-Fry

1 1/2 c. fresh cherries, pitted
(may substitute frozen or canned)
2-3 boneless, skinless chicken breasts
2 T. teriyaki sauce
2 T. dry sherry
1 T. lemon juice
3 1/4-inch-thick slices fresh ginger
1 T. cornstarch

(Pictured above)

► **Send in your recipes!** If published, you'll receive a free kitchen gadget. Send in: your **ALL-TIME FAVORITE** previously published Country Lines recipe by **Oct. 10** (no gadgets this category), **SAUSAGE** recipes by **Dec. 10**, and **BUDGET-FRIENDLY** recipes by **Jan. 10**. Mail to: Country Lines Recipes, 2859 W. Jolly Rd., Okemos, MI 48864; or email jhansen@countrylines.com.

3 T. vegetable oil
 6 green onions, sliced diagonally in 1-inch pieces
 2-3 sm. carrots, thinly sliced
 2 c. snow peas
 4 oz. sliced water chestnuts, drained
 2 oz. Chinese rice stick noodles, cooked, or 2 c. hot cooked rice
 1/4 c. slivered almonds

Thaw cherries if frozen; drain reserving juice and set aside. Cut chicken into bite-sized cubes. Combine teriyaki sauce, sherry, lemon juice and ginger in a small bowl; stir in chicken. Cover and marinate in refrigerator, one hour; stirring once or twice. Drain chicken, reserving marinade. Discard ginger. Blend reserved cherry juice into cornstarch; stir in marinade; set aside. Heat oil in wok or large skillet, over high heat. Add sliced green onion, carrots and snow peas; stir-fry 2-3 minutes until tender but still crisp. Remove vegetables from wok. Adding more oil if needed, add chicken and stir fry 3-4 minutes. Push chicken away from center of wok; add cornstarch mixture. Cook and stir until thickened and bubbly. Stir in chicken, cherries, vegetables and water chestnuts; heat through. Serve over noodles or rice and garnish with slivered almonds. Serves 4.

Pam Assenmacher, White Lake

Stir-Fry Shrimp and Vegetables

1 lb. med. raw shrimp with shell on
 1 t. cornstarch
 1/2 t. salt
 1/2 t. roasted sesame oil
 1/8 t. white pepper
 7 lg. bok choy stalks
 6 oz. fresh pea pods
 4 oz. fresh mushrooms
 2 green onions with tops
 2 T. oyster sauce
 1 T. cornstarch
 1 T. cold water
 2 T. olive oil
 1 t. finely chopped ginger root, optional
 1 t. finely chopped garlic
 1 T. olive oil
 1/2 t. salt
 1/2 c. chicken broth



Peel shrimp; pat dry and toss with 1 teaspoon cornstarch, salt, sesame oil and white pepper. Cover and refrigerate for 20 minutes. Remove leaves from bok choy and cut in 2-inch pieces. Cut stalks into diagonal 1/4-inch pieces. Remove strings from pea pods and place in boiling water; cover and cook 1 minute. Drain and rinse in cold water; drain and set aside. Cut mushrooms into 1/2-inch slices. Cut onions into 2-inch

pieces; shred lengthwise into fine shreds. Cover with ice water for 10 minutes or until pieces curl; drain. Combine oyster sauce, 1 tablespoon cornstarch and water in a small bowl; set aside. Heat wok until very hot. Add 2 tablespoons olive oil; tilt wok to coat sides. Add shrimp, ginger and garlic. Stir-fry until shrimp are pink; remove and set aside. Heat wok until hot; add 1 tablespoon olive oil. Add bok choy stalks, mushrooms and salt; stir-fry 1 minute. Add bok choy leaves and broth; heat to boiling. Stir in cornstarch mixture and cook until thickened. Add shrimp and pea pods; cook and stir for 1 minute or until the shrimp is hot. Garnish with green onions.

Joyce Runberg, Beaver Island

Stir-Fried Beef and Peppers

5 T. cooking oil, divided
 1 lg. green pepper, sliced
 1 lg. red pepper, sliced
 1 onion, sliced
 3/4 lb. beef flank steak
 3 T. soy sauce
 3 T. cold water
 2 t. cornstarch
 1/8 t. hot pepper sauce
 1 t. ginger
 hot cooked rice



Slice beef across the grain into very thin strips; set aside. Heat a large skillet or Dutch oven over high heat for 3 minutes. Add 3 tablespoons oil, green and red peppers, and onion. Cook, stirring constantly until vegetables are coated with oil. Stir-fry 5 minutes or until vegetables are tender-crisp; remove from pan and set aside. Add remaining 2 tablespoons oil to skillet and heat. Add meat and stir-fry 3 minutes or until lightly browned. Combine soy sauce, 3 tablespoons water, cornstarch, ginger and hot pepper sauce. Pour over meat; cook until sauce thickens and boils. Return vegetables to skillet; stir to coat. Serve over hot rice. Serves 6.

Mrs. John Clairmont, Bark River

Ginger Chicken

1 lb. chicken breasts, cut in 2-inch cubes
 1/2 c. whole kernel corn
 1/2 c. chopped broccoli
 1/2 c. frozen carrots
 1 c. sugar snap peas
 5 T. butter
 3 T. ginger teriyaki sauce
 4 c. cooked white rice

In a large skillet, melt 3 tablespoons butter over medium heat. Add chicken; cook thoroughly. When chicken is cooked, add all vegetables and remaining 2 tablespoons

butter; mix well, cover and cook 5-8 minutes until vegetables are crisp-tender. Add ginger teriyaki sauce; stir well. Reduce heat to low and cook for an additional 3-5 minutes. Serve on top of rice.

Danielle Cochran, Grayling

Stir-Fry Venison

2 T. vegetable oil
 1 lb. venison cut cross-grain in 1/2 x 2-inch strips
 3 med. potatoes, thinly sliced
 1 med. onion, thinly sliced
 thinly sliced green, yellow and red pepper
 1 clove garlic, finely chopped
 1 lb. mushrooms, thinly sliced
 1/3 c. soy sauce
 2 T. brown sugar
 1 T. corn starch
 1 T. water
 cooked noodles or rice



Heat oil in a large skillet or wok over high heat. Cook and stir venison and garlic about 2 minutes or until browned. Add potatoes, onion, pepper and mushrooms; cook, stirring frequently until tender. Whisk together soy sauce and brown sugar in a small bowl. Add to skillet. Stir together cornstarch and water until smooth; add to skillet. Cook until heated through and sauce thickens. Serve over noodles or rice.

Paula Brousseau, Bellaire

Indonesian Style Beef & Pasta

1 1/4 lb. boneless beef steak, sirloin or top round
 5 T. Teriyaki sauce, divided
 2 T. creamy peanut butter
 1 T. water
 1/8 - 1/4 t. crushed red pepper
 1/8 - 1/4 t. ground ginger
 6 oz. dry vermicelli or thin spaghetti
 2 T. vegetable oil
 1/2 c. seeded and chopped cucumber

Cut steak into 1/8-inch thick strips and place in a shallow baking dish. Add 2 tablespoons teriyaki sauce; toss to coat evenly and set aside. In a bowl, combine remaining 3 tablespoons teriyaki sauce, peanut butter, water, red pepper and ginger; set aside. Cook vermicelli according to package directions; drain and rinse. In a medium bowl, toss vermicelli with peanut butter mixture to coat well. In a large non-stick skillet or wok, over medium-high heat, heat oil until hot. Add beef, half at a time; stir-fry 1-2 minutes until no longer pink. Add cooked beef to pasta; toss lightly to combine. To serve, sprinkle with chopped cucumber. Serves 4.

Duane Alvord, Port Sanilac

Raising Chickens Is Easy

It seems like a perfect match for the gardener or small farmer.

More and more people seem to be looking for ways to “grow it fresh” in their backyard. This includes the growing of vegetables, of course, but also the raising of livestock. One animal that seems like a perfect match for the gardener or small farmer is chickens. Chickens will provide you and your family with hormone-free meat and eggs in addition to manure for the garden.

Chickens seem to be the rave right now. There are as many new websites on the subject as there are different breeds of the bird. Even city folks are getting into the act as they approach municipal boards to approve ordinances for raising a few hens in the city limits.

This spring, at the pleading of my grandson, I hesitantly gave the okay to purchase some of those fuzzy chicks sold at the feed store. Buying a variety of types is the best way to get started. We bought 10 laying hens, a rooster, and one meat chicken (they all looked



Mitchell Miller, of Stalwart

the same to me as chicks!).

Raising chickens is really pretty easy. Their main requirements are space, food and protection from predators, including fox, skunks and the occasional neighborhood dog. They also need a protected area, such as a chicken coop, where they can be sheltered from the elements.

Chicks are sold in the spring and can be purchased from local feed stores or mail-order catalogs. The main thing with chicks is to keep them warm. They need temps at 90-100 degrees for the first week you bring them home, and then drop the temperature 5 degrees each week until you get them in a coop. A heat lamp will be needed to keep them

warm, but be careful not to create a fire hazard. One way to reduce the risk of fire is to hang the cord (which is clamped onto the side of a plastic box) above the container so that if the lamp comes loose, it won't fall into the sawdust bedding material. Also, be careful to keep children away from the lamp's heat, which can be pretty intense.

Chicks require a specially formulated feed and a constant supply of water. Feed chickens a starter feed until they are old enough to start laying eggs, which is about five months, according to Kristen Taylor, of Pickford Feed Service, in Pickford. At this time you should start feeding them a laying mash, which consists of about 17 percent protein, plus oyster shells, grit and vitamins, Taylor says.

Chicks also need room to grow. Last spring, after about four weeks of having a dozen chicks in our bathroom, we moved them to a corner of my heated greenhouse. I surrounded the fledgling chickens with makeshift walls that could be moved out wider as they grew, and eventually I got them into their own coop.

Chickens need about 2 to 3 square feet per bird inside the hen house and 3 to 4 feet per bird outside. Chicken wire appears

Source for unusual chickens:
mcmurrayhatchery.com

For more information on
raising chickens:

backyardchickens.com

to be the best fencing to keep the chickens in and predators out.

Chickens are a productive lot for the small-scale farmer. A healthy hen averages 255 eggs a year, and a good meat chicken can be ready to butcher in less than three months. They require minimal space and can even be free-ranged around the barnyard, providing they are safe from nearby dogs. However, they can be a problem if they enter the garden, which many gardeners can attest to. Keep them out of the garden at least until the end of the season, when they can go in and feast on the bugs. While eating bugs, they'll also be fertilizing your garden!

Meat chickens should be raised separate from laying hens since they require a different feeding regimen, Taylor says. These beefy birds, which are obviously bred to grow fast, need a regimen of 12 hours of feed, followed by 12 hours without feed. The reason for this, she says, is so the birds don't gorge themselves and also to develop strong bones and body structure. In just eight to 10 weeks they'll be ready to butcher.



Winter can be problematic for chickens, though it doesn't have to be. Make sure they are sheltered from drafts and have a constant supply of water. Keep the coop dry by providing some type of bedding material, preferably pine shavings. Predators become even more of a problem in the winter as they search for limited food reserves. Plug any holes in your coop and check often to make sure no new ones are being made by burrowing animals. Also,

make sure your chicken feed is kept in a tightly sealed container. Hens need about 14 hours of light to keep egg production going; artificial light, perhaps on a timer, will need to be provided.

It's been awhile since I've raised chickens, and I must admit to missing their barnyard strutting and scratching. As long as I can keep them out of my vegetable garden and flower beds, and they don't chase my grandson, we'll keep on raising them!

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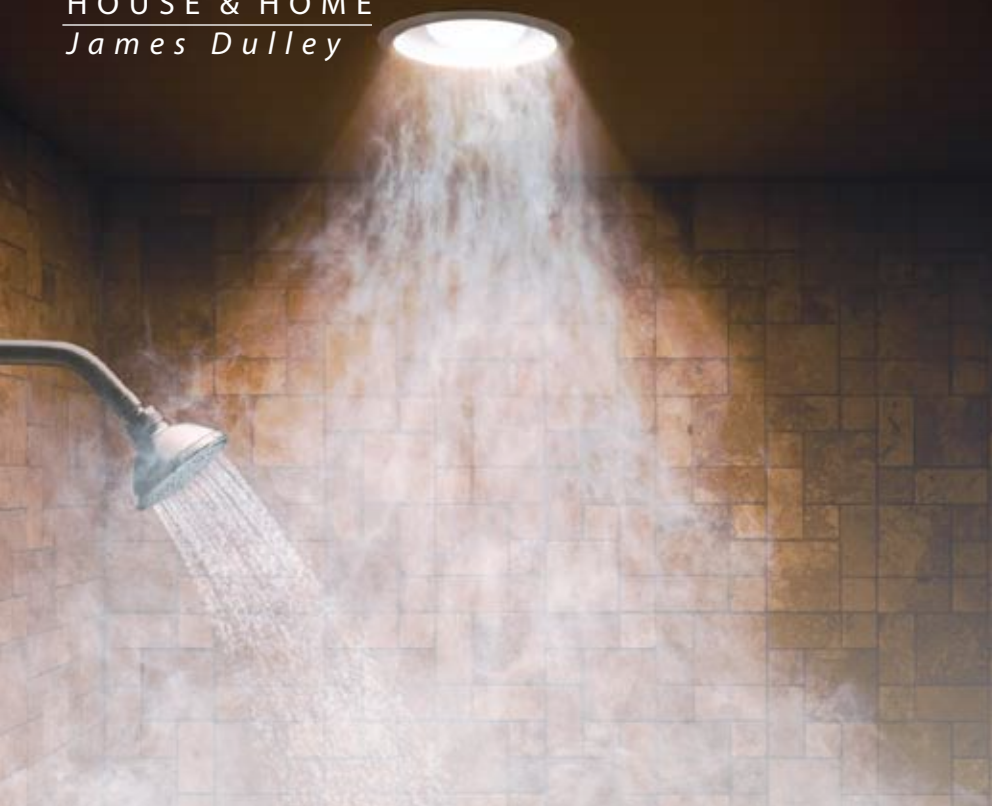
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Bathroom Lighting

Remodeling a bathroom? Make smart lighting decisions to get the most energy savings from your efforts.

People don't often think about lighting and energy efficiency when it comes to bathroom remodeling, but it's as important as installing the proper vanity or plumbing fixtures. Today's modern master bathrooms and dressing areas are often as large as some second bedrooms and are more than just a place to shower, shave, etc.

If the lighting in both of your bathrooms is like most older bathrooms, it consists of an overhead light, perhaps built into a vent fan if there is no window. If there is a window in the bathroom, very few builders went to the expense of installing a vent fan. Today, vent fans are almost always installed to address indoor air quality concerns in modern, more airtight houses. While remodeling, definitely install a vent fan.

The lighting for your children's bathroom will be simpler, so tackle it first. A basic overhead light should be adequate until they get old enough to shave or wear makeup. There's likely already an incandescent overhead light-only or fan/light fixture. In either case, replace it with a new Energy Star® qualified fan with a compact fluorescent lightbulb (CFL). It will use 75 percent less electricity

for lighting than a comparable incandescent bulb and the fan will be much quieter than the old builder-quality vent fan.

Since children often forget to turn lights or vent fans off when they leave the bathroom, select a vent fan with a motion or humidity sensor to automatically shut it off at the right time. This can save a significant amount of electricity. If you have only a light fixture, use a motion-sensing switch, such as the Lutron MeadowLark™ model. This allows you to program the length of time the light stays on after no motion is detected, along with several other energy-saving functions.

Planning efficient and effective lighting for your master bathroom and dressing area is a bit more complicated. Use a basic lighting design technique called layering to provide proper lighting for various activities. This is the same design technique professionals use for every other room of a house.

The three basic lighting layers are task, ambient, and accent or decorative. Bathrooms are task oriented (showering, shaving, applying makeup, general grooming), so adequate task lighting is most important.

Ideally, place lighting on both sides of the mirror and also on top for three-direction

lighting. This eliminates shadows that can be problematic when shaving or applying makeup. If the mirror is not too wide, wall-mounted vertical fluorescent tube lighting on each side of the mirror is best and efficient.

Several companies offer efficient decorative T2 or T5 fluorescent fixtures. Some

A recessed light with a built-in vent fan provides task lighting in the shower and exhausts humidity. The fan has an automatic humidity sensor switch.

can be attached to wide mirrors, and decorative sconces with CFLs are effective around narrow mirrors. Daylight-type CFLs provide the

best color rendition for makeup. Halogen bulbs may also be used, as they offer a longer life, are somewhat more efficient than standard incandescent bulbs, and provide a whiter light.

For over-the-mirror task lighting, Kichler® offers a new decorative rail design (this design also works well for accent lighting). It is similar to track lighting with three or four directional fixtures, but they are mounted on a rail that hangs down a few inches from the ceiling. It mounts to the ceiling over a standard ceiling electrical box. Several of the rail fixtures use super-efficient, long-lasting white light-emitting diode (LED) bulbs.

For the bath/shower area, recessed overhead task lighting works well. If you are remodeling on your own, consider installing low-voltage fixtures for safety and easy installation. Broan-NuTone® offers recessed light fixtures with built-in exhaust fans. These are efficient because excess moisture is drawn from the shower stall before it ever enters the room.

For ambient and accent lighting, lower-wattage incandescent fixtures—either overhead or sconces—are effective. These can be controlled by dimmer switches to save energy. The new Lutron Eco-Minder™ dimmer is a good choice. As the lights dim, an LED on the faceplate changes from red to green to remind you to dim the lights to save energy. On some models, the switch also functions as an efficient night light. It is wise to install separate dimmer switches for the various layers of light. Another daytime ambient light option is an ODL® tubular skylight with a solar-powered remote dimmer.

Have a question for Jim? Send inquiries to: James Dulley, Michigan Country Lines, 6906 Royalgreen Dr., Cincinnati, OH 45244 or visit dulley.com.

Photo - Broan

Blue Jays

Avian bullies at backyard feeders.

They're blue, boisterous and bold bullies.

As if that isn't enough, they are nest-robbers, thieves and loud-mouthed mischief-makers. (And also fun to watch when they turn up at your feeders to begin their avian pranks.)

Blue jays, with the Latin tongue-twister name of *Cyanocitta cristata*, are members of a larger family of birds called *Corvidae*. Cousins of the blue jay include crows, ravens, gray jays and magpies, but it's the blue jay that's the most familiar at bird feeders. Jays are very territorial. They are greedy, pushy and pugnacious towards other birds, often pushing or scaring off smaller or less bellicose birds in their eagerness to claim the larger share of seeds.

Did I mention they can also be loud, with a portfolio of shrill cries, metallic clicks and sounds effects? Good mimics, they sometimes imitate the calls of other birds, including hawks. To anyone listening, the variety of blue jay jabber seems endless.

In our part of the world, the blue jay is common. Other parts of the country have related, but differently marked and colored jays. Western states have Pinyon and Steller's jays. While their dress uniforms differ from our blue jay, their attitude and manners are much the same—that is, pushy, greedy and sometimes obnoxious with bullying ways.

Our common blue jay is a fairly large passerine (perching) bird. Physically, it is described as 9 to 12 inches long; bright blue on top and white-to-gray on its throat,



chest and belly. It's markings are a gray-blue crest on its head and black-and-white bars on the wings and tail. The bill, legs and feet are black, and it sports a black "necklace" on its lower throat.

The blue jay is omnivorous—that is, eating fruit, acorns, seeds, nuts, insects, mice and frogs. Sometimes a blue jay will raid a nest for eggs and young birds, though its nest-rober reputation is bigger than it should be since studies show that such food is a very minor part of its diet.

Many trees and plants around the state are the result of blue jays burying food for later consumption, making them "accidental foresters." Like squirrels, they often bury food to eat later and some seeds and nuts are never recovered. The result is that some of the buried mast grows into plants or trees.

When mating time arrives each year, the mated female blue jay will lay four to six eggs in a nest made of sticks and twigs, and lined with grass. Nests are made in trees and shrubs, in secretive sites that are often very difficult to find.

The female incubates the eggs with some

male help. The eggs incubate for about 17 days, and once hatched, both parents will feed the chicks.

To call blue jays "bullies" is accurate. Groups of blue jays will often attack intruders and predators. This writer can attest to their aggressiveness in protecting a nest site. Before we remodeled the façade of our home there was a wide ledge running across the front. A female jay chose that as her nest site, and after the chicks arrived we had to duck when leaving the house—the female would buzz us, even getting a jab or two delivered to show her displeasure.

Blue jays are also one of the more intelligent birds. They will wait and watch for a camper to put food down on a picnic table. As the person walks away, they will dive down and grab it. Along with crows, jays will also watch someone planting seed crops and dig up and eat the seeds when the gardener walks away. Forever opportunists, they are cunning in their thieving ways.

While jays do migrate, enough stick around to keep winter feeder antics lively as those "bullies in blue" swoop in again.

Aerial Patrols Improve Transmission System Reliability

Wolverine Power Cooperative owns and operates 1,600 miles of transmission line to serve its member-cooperatives. One way that we monitor our transmission system to ensure its efficient operation is from the air.

Twice each year, in summer and winter, a Wolverine lineworker boards a helicopter to look for trouble spots. The helicopter generally flies low, just above the lines, for a visual inspection. Structural flaws

Twice each year, our transmission lines are inspected by helicopter.

on poles, insulators, cross arms and conductors

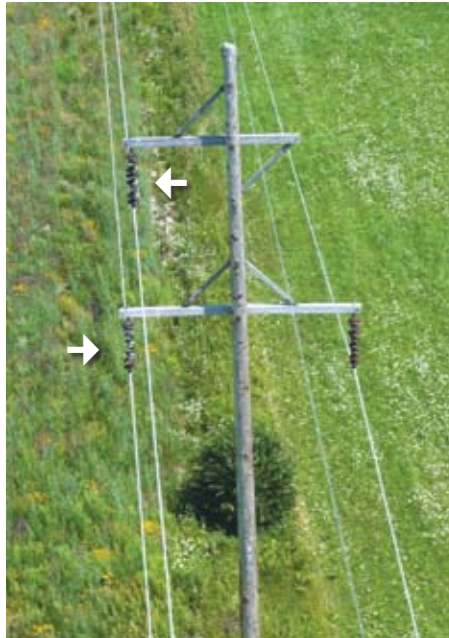
are documented for repair. From the air, the lineworker also checks sections that are difficult to reach by land, such as poles placed in swamp areas.

For the past several years, including this past August, Ed Boyer, a senior Wolverine lineworker based in Boyne City, has conducted the aerial patrols.

“Ed and the pilot found one area near Ludington with serious damage,” explains Klint Weaver, Wolverine’s transmission services supervisor. “The porcelain insulators on four of our poles appeared to be damaged by gunfire, placing thousands of area co-op customers at risk for a power outage.”

Wolverine discovered and repaired damage most likely caused by gunfire to this same section of its transmission system last fall. The area consists of farm land and hunting property. Deer hunting blinds have been placed on or near the cooperative’s right-of-way, creating safety hazards.

“We’ve conducted aerial patrols of our transmission system for several years now,” Weaver adds. “Our multi-year construction plan for maintaining and improving the system is paying off, as we’re finding fewer problems during aerial inspections.”



Damage to porcelain insulators on Wolverine’s 138 kilovolt (kV) transmission line near Ludington was discovered during the August aerial patrol of the cooperative’s transmission system. The damage appeared to be caused by gunfire.



The day after the broken insulators were discovered, Ed Straathof, a senior lineworker for Wolverine at Hersey, directed field work requiring a bucket truck to repair the damage. The hunting blind in the foreground poses safety concerns due to its location within the center 30 feet of the right-of-way.



Aerial inspections of Wolverine’s transmission system provide a different perspective of the cooperative’s facilities. Pictured is Wolverine’s new substation near Charlotte, which was energized in June.

People Fund Helps 'Raise the Roof' For Oceana Center Grange



A People Fund grant of \$5,000 this year ensured that members of the Oceana Center Grange could continue holding meetings and events at their Grange Hall east of Hart.

"Receiving the People Fund grant was truly amazing!" says Ardith Merten, information chairman and a long-time Oceana Grange member.

"For an all-volunteer organization like ours to come up with \$10,000 for a building project—well, it's hard," she adds.

The People Fund grant paid one-half of the cost for a new roof on the building. At 105 years old, the old metal roof was starting to leak. The other \$5,000 for the roof came from the William F. Lathers Foundation, administered by the Oceana County Community Foundation.

Grange organizations are nonprofit entities that advocate for the advancement of rural America. The National Grange, founded in 1867, is the nation's oldest agricultural organization. It consists of local grassroots units established in 2,700 local communities throughout 40 states.

The Michigan State Grange describes itself as a fraternal, community service organization with roots in agriculture. Grange membership develops personal leadership skills and strives to strengthen communities through local involvement.

Grange organizations boast over 200,000 members nationwide. Around 91 members belong to the Oceana Center Grange.

"Today," Merten explains, "we keep our toes in agriculture, being in a rural location. But mostly we're about community service."

Some of the Oceana Center Grange annual activities include helping the Crystal Valley Care Fund, another popular local charity, raise money for area individuals and families in need.

Their calendar includes monthly meetings, and Grange volunteers also raise enough funds to buy a birthday present for every foster child in Oceana County. In addition, they buy student dictionaries for Oceana County



Members of the Original Michigan Fiddler's Association hold a jam session in June at the Grange Hall. They were there for a potluck the night before the Fiddler's Jamboree held at Hart High School. June 2011 will mark 25 years that the Oceana Center Grange has sponsored the Fiddler's Jamboree event. **Right:** The Oceana Center Grange Hall east of Hart sports a new metal roof, thanks to a \$5,000 People Fund grant that paid for half the cost.



third graders, among many other community projects and public fundraisers.

Their most special event, according to Merten, is a Penny Fair held at the Grange Hall the second Saturday in October. Since it's mainly a talent show, she explains that it's a good opportunity to enjoy seeing "adults being ridiculous." Other attractions include an auction and games for children.

Grange members also serve a Thanksgiving Dinner at the Hall in November that is open to the public. In December, they offer a "progressive" Christmas dinner that starts at the Grange Hall, then moves on to at least three other locations.

Grange members are thankful to Great Lakes Energy members who contribute to the People Fund. Such generosity makes it possible for this grassroots organization to "raise the roof" and continue their tradition of community service and fellowship at their beloved Grange Hall.

Help support the People Fund and worthwhile organizations in your community. Your bill will be rounded to the nearest dollar each month, with the extra change going to the People Fund. Money is then granted to nonprofit organizations in your local community. Sign up today by calling 888-485-2537 or visit gtlakes.com.



Holding certificates of thanks from Grange members for contributions to the Grange Hall's new metal roof are Tammy Carey (left) and Dick Walsworth (right). Walsworth is a Great Lakes Energy director and accepted the certificate on behalf of the People Fund, which donated \$5,000 toward the roof. Carey is the executive director for the Oceana County Community Foundation, which administers the William F. Lathers Foundation that contributed the other \$5,000 for the roof.

Photos – Janice Merten, Oceana Center Grange member

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Electrical Safety During Storms

Early fall can bring stormy weather. As a result, take precautions with your home's electrical system.

Keep in mind that storm debris can easily ignite if it comes into contact with downed power lines, especially when electrical wires are severed. Also, standing water and even appliances can become electrically charged.

Use these tips to keep safe after storms:

General Electrical Safety

▲ Never touch a downed power line. Call your electric co-op to report it immediately. Avoid contact with overhead lines during cleanup and other activities. Assume all wires on the ground are electrically charged.

▲ Be sure all electric and gas services are turned off before entering buildings for the first time.

▲ If water rises above the electrical outlets in your home, contact a licensed electrician before turning on your main circuit breaker. Outlets and wiring that contact with water could present a fire and shock hazard.

▲ Allow all electrical appliances and equipment, once submerged, to dry thoroughly. Have them checked by a qualified repair person before turning them on.

▲ Replace damaged extension and appliance cords, loose prongs or plugs.

Generator Safety

Portable electric generators are often put into use for temporary power. Be sure to follow the manufacturer's directions for installation and operation.

Use generators or other fuel-powered machines outside the home. Carbon monoxide fumes are odorless and can quickly poison you indoors.

Take special care not to overload the generator. Use appropriately-sized extension cords to carry the electric load. Make sure the cords have a grounded, three-pronged plug and are in good condition, and never run cords under rugs or carpets.

Never connect generators to another power source, such as power lines. The reverse flow of electricity can electrocute an unsuspecting utility worker.

Sources: U.S. Fire Administration, usfa.fema.gov; Consumer Product Safety Commission, cpsc.gov.

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Many Factors Influence Power Restoration

In storm situations, it is not always easy to say when power will be restored because of events beyond our control.

Outage restoration times are influenced by the outage size, amount of power line damage, location of your home, safety concerns, and other factors.

Outage Size – In the case of a small outage that affects only a few Great Lakes Energy members, we are often able to tell you when power will be restored because we can get to the problem quickly. Unfortunately, that isn't possible immediately after a big storm hits and leaves lines down at hundreds of locations across our 26-county service area.

Amount of Damage – Outage length can vary from the relatively short time it takes to replace a fuse that was destroyed by lightning to tree-related damage that can knock out power for hours. Crews sometimes cannot get to an outage location without first removing trees and limbs along their route. Add to that the time it takes to cut and remove fallen trees and limbs from the lines before they can even begin making repairs. More poles may need to be sent to the location to

replace broken ones, which further adds to the repair time.

Home Location – The route electricity takes within our distribution system to reach your home begins at the substations that supply power to the main power line circuits or “trunk lines.” Trunk lines feed power to hundreds of secondary circuits or “taps” that serve smaller groups of members. During a major storm, your home's location along this route often determines how long it will take to restore your electricity.

Crews repair damages to the transmission lines, substations and trunk lines first. This strategy allows us to restore power to the greatest number of members in the shortest amount of time. It often takes the same amount of time to remove trees and restore power for 1,000 people as it does for 10. If you live on a line that serves only a handful of members, you may experience a longer wait for the lights to come back on.

Although the outage problem outside your home may only require two hours to repair, it could be several hours before crews can get to your home in a storm situation. They may

have other outage locations they must visit first and their travel time could be hindered by bad weather.

Safety Concerns – Hazards created by damaged power lines, such as pole fires or live wires lying across roadways, are addressed as quickly as possible. Restoration of power for emergency public services such as hospitals, police, fire and ambulance protection is also a high priority.

Although every effort is made to promptly restore power to members on life-support equipment, long outages are still possible after a major storm. We recommend that members have back-up generation available if a prolonged outage poses a threat to their welfare.

Other Factors – Because we maintain about 14,000 miles of power line over much of the western half of the Lower Peninsula, a major storm is bound to impact any or all of our service area. Changing weather conditions affect restoration efforts, such as icy, snow-covered roads that make travel difficult even for our big vehicles. Lineworker help from neighboring utilities and contractors is sometimes limited if widespread storm damage creates statewide outages.

More helpful emergency information is available at gtlakes.com—visit the “Outage Information” section under “Your Home.”

Scholarship Winners

Great Lakes Energy is proud that it was able to help four local students earn scholarships this fall. It demonstrates our commitment to the principle that cooperatives support education and training opportunities for their members.



Great Lakes Energy director Paul Byl presents a certificate to Brandon Kieft of Rothbury who recently won a \$1,000 scholarship from the Michigan Electric Cooperative Association (MECA). He plans a career in bio-medical engineering. Great Lakes Energy is a MECA member.



In cooperation with Alpena Community College, Great Lakes Energy awarded three Utility Technician Program scholarships to, from left, Tyler Armantrout of Levering, Brad Whitney of Mears and Kyle Vanderlaan of Hart. Each will receive \$1,000 to complete the lineworker training program provided they meet scholarship requirements.

Keeping Lights On, Costs Down

It starts with our power supplier.

Power supply accounts for approximately 65 percent of your monthly electric bill and represents costs we incur from our power supplier, Wolverine Power Cooperative. What's included in those costs?

It begins with generation.

Wolverine is currently under contract with other utilities for the majority of the power needed to supply Great Lakes Energy and Wolverine's five other members. This is the base load generation that serves your home, farm or business the majority of the time. In the Midwest, the two primary types of base load power plants are coal and nuclear, providing nearly 85 percent of the region's electric needs.

On days when electricity demand is above normal, Wolverine can call on its generating fleet. The cooperative operates six "peaking" power plants. Peaking units typically run on hot summer days when air conditioning is needed to stay comfortable, but can also supplement Wolverine's power purchases in winter months.

Renewable energy is also part of the generation mix for Wolverine and its members. The cooperative is purchasing the total output of the Harvest Wind Farm under a long-term agreement. Harvest, the state's first commercial-scale wind farm, is capable of meeting the electricity needs of about 15,000 homes when all 32 turbines are

running. Wolverine continues to actively seek out base load power supply to serve members, as the contract for the majority of the cooperative's base load supply expires Dec. 31, 2011.

From generation to delivery.

Whether purchased under contract or generated at a Wolverine peaking facility, electricity is transported to the Great Lakes Energy distribution system over Wolverine's transmission lines and through its substations. The Wolverine transmission system extends 1,600 miles in 35 counties in the Lower Peninsula. It's interconnected by 180 substations.

In the past, Wolverine has focused on transmission maintenance. In recent years, significant improvements have been made to the aging system. Wolverine completed one major transmission substation in 2010 near Charlotte, giving the cooperative a new interconnection to support its



Transmission system improvements, such as this pole replacement project in Mecosta County, help Wolverine Power Cooperative deliver reliable power to Great Lakes Energy and other members who rely on Wolverine for their power supply.

transmission system.

Wolverine also worked with its members to construct two distribution substations in 2010, and a third station will be energized in the coming weeks. In addition, upgrades to 45 miles of transmission lines will be completed this year.

Wolverine works under a five-year construction plan for its transmission system, and the coming years call for work plans to improve and ensure delivery of your electricity. Additionally, the cooperative's land management division will continue efforts to keep power lines clear.

Meeting a mission.

Wolverine's directors, management team and employees are fully aware of the cooperative's impact on your monthly electric bill. That's why providing outstanding service to members by delivering reliable, competitively-priced power is Wolverine's mission.

Call 800-678-0411 to Report Outage

Great Lakes Energy's automated outage reporting system identifies your outage location moments after you dial the toll-free emergency number.

When you dial 800-678-0411, the system automatically matches your phone number with your location so we know where to send repair crews. You can remain on the line if you have emergency information to report, such as a downed power line.

This system allows us to handle many emergency calls more quickly. For the automated system to work, you must:

- Provide us with a primary, current,

landline or cell phone number for the location where you receive Great Lakes Energy's electric service.

- Call from the primary phone number that is listed on your account when prompted.

■ List your cell phone number in our records if it is your only phone. Make sure your cell phone number is not blocked when you call so our system can recognize it.

- Remember that phones that plug into an electrical outlet may not work during an outage. A basic phone that only requires the phone line to be plugged in should be used.

Viva La Branche!

The new GM releases its new electric Chevrolet Volt this fall. If it catches on like many predict and hope, it will be a boost to our state's economy and a welcome move forward in the quest for a cleaner environment.

Will the Volt become the latest darling of our car culture? Will it generate the passion that followed the Corvette, Mustang, Camaro, or even the Prius? Will *you* buy one?

At a cost of \$41,000 and up, less a \$7,500 federal tax credit, the Volt won't be the 'people's car.' The prospect of being able to drive 40 miles on battery power alone is enticing, but if your daily drive requires you to travel longer distances, when the gas motor will have to kick in to recharge the batteries, you might not see the value.

The Volt is a cool-looking car. It has nice lines, enough space for average families, and all the latest gadgets.

But I'm sure it doesn't have backseat rear armrests that can each hold a six-pack like my parent's first car—a 1950 two-door Studebaker. (Don't ask.) Nor will it have the cavernous interior room of my first car, a 1948 Plymouth four-door sedan. When I bought it from my future father-in-law for \$100, it was already 15 years old and needed an engine overhaul. You'd think Larry would have sold me a more road worthy car since I was dating his daughter. A friend showed me how to take the engine apart and put it back together. I've found working on cars, especially old ones, to be a relaxing and satisfying pastime ever since.

The Volt certainly won't match my favorite car, a banged-up, baby blue 1963 Saab 96 we bought in 1973 to replace a wrecked Volvo 122S. The Volvo was my first new car, solid, dependable and a great road car. The Saab, well, it probably was solid when it was new, too. After all, it was made by the company that made Sweden's military jets. With a two-stroke, three-cylinder engine, it certainly was unique. Pouring a can of oil in the gas tank with every fill-up was a sure way to cause a lot of weird looks from other motorists. With its streamlined body and a gizmo that

let you freewheel down hills, the car was a miser on gas. Getting 42 miles to the gallon during the mid-70s oil crisis was great. Plus, I was back in school, and later couldn't get a job during a recession much like this one. We depended on Barbara's new teaching job for food.

My job was to keep that car on the road. We lived in married housing on the Michigan State campus. The car didn't like to start on cold mornings, so I would have to push the car from the open driver's side door down a slight incline, jump in and pop the clutch to start it. The car was warmed up for Barbara when she was ready to leave—what a treat. Of course, sometimes she got there first, tried to start the car, and then ran up to the apartment yelling for me to get the blasted thing running.

I still wonder how we got through that first teaching year.

On a trip back from Ironwood in the summer of '73, on the M-69 'shortcut' between Crystal Falls and Escanaba, the Saab blew its head gasket. That's pretty much like a heart attack. The coolant that keeps the engine operating at the appropriate temperature leaks into the cylinders, and since water and anti-freeze don't help the combustion process, the engine dies.

There we were, on a quiet road in the middle of empty countryside, stranded. My sister's boyfriend was riding with us back to East Lansing, so, while Barbara drove, he helped me push the relatively light car a mile down the road to La Branche, which largely consisted of the La Branche Tavern.

We went into the bar to see about using their phone to call a wrecker, although finding anyone able to actually fix that Saab seemed remote. Then the boyfriend said, "sorry," but he needed to get back today, and he left to hitchhike a ride.

So, Barbara and I sat at the bar and explained our predicament to the owner. A few seats away was a thin, long-haired, bearded guy in a plaid shirt and jeans, a

Viet Nam veteran. He heard our sad story and said he might be able to help.

He was a motorcycle mechanic and had tools in his truck. Maybe he could seal the head gasket tight enough

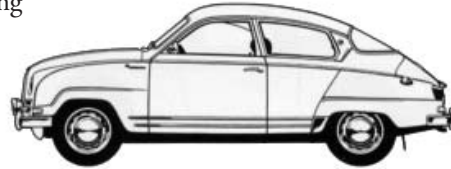
for us to get back to East Lansing. Better yet, I said, this is basically a motorcycle engine, and I have a head gasket in the trunk. (Appar-

ently, blown head gaskets were a common problem in these cars and the previous owner kept a spare!)

In the middle of a hot Sunday afternoon in August, the motorcycle mechanic vet got his tools out and helped this Air Force vet remove the head, clean off the old gasket, put in the spare, torque the bolts, and refill the radiator. We were done in two hours. The engine spit and sputtered for a few moments and then took off with its regular popcorn popper sound.

After grabbing a sandwich in the bar and buying our savior a beer and a meal—he wouldn't take anything else—we were on our way. I learned only a few years ago, when I mentioned this event at an annual meeting of Alger Delta Cooperative Electric Association, that our hero's name is Jack Fisk. I've always hoped to see him again and buy him another beer, although the La Branche Tavern is gone.

Now GM has dumped Saab, which it bought a few years ago, to concentrate on its core business, which now includes the Volt. I'm sure it will be dependable, but it could never be as lovable as that quirky Saab.



Can a Chevy Volt be as lovable as a 1963 Saab 96?

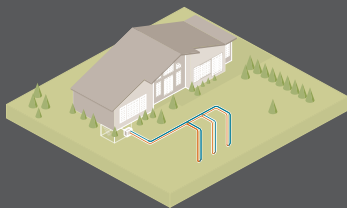


Mike Buda, editor emeritus of Country Lines, has a 1951 Chevy pickup that needs a lot of attention.

Email Mike at mbuda@countrylines.com or comment on his columns at countrylines.com/column/ramblings/

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