

MICHIGAN COUNTRY LINES



MILLER FAMILY

FARM

— A LEAP INTO —
UNCHARTED WATERS

Both of these devices create hot air
but which uses less power?



Space Heater (high)
1,500 watts



**7 Series
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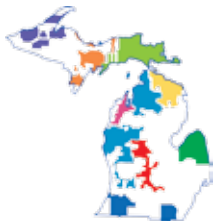
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1. 7 Series unit uses approximately 900 watts while running in speeds 1-2.





Michigan's Electric Cooperatives
countrylines.com

January 2017
Vol. 37, No. 1

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Publisher
**Michigan Electric
Cooperative Association**

Michigan Country Lines, USPS-591-710, is published monthly, except August and December, with periodicals postage paid at Lansing, MI, and additional offices. It is the official publication of the Michigan Electric Cooperative Association, 201 Townsend St., Suite 900, Lansing, MI 48933.

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

POSTMASTER: SEND ALL UAA TO CFS.

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Guess Our New Mystery Photo And Win A Bill Credit!
Submit An 'I Remember' Story And Earn \$50!

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Here Comes The Sun... With Energy For You!



Bill Scott
Great Lakes Energy
President/CEO

Do sunny days make you think about harnessing the sun's energy to power your home? Okay. Maybe not. But what if there was an easy, inexpensive way for you to support the local generation of clean, renewable energy?

If you considered solar as a part of your home's energy mix—but were dissuaded by high costs or maintenance requirements—we're happy to tell you that solar energy is more accessible than you might think!

We are joining our power supplier, Wolverine Power Supply Cooperative, in a community solar project. Later this year, Great Lakes Energy members will be able to purchase a community solar subscription in a new solar array being built near Wolverine's Cadillac headquarters. It will consist of 4,352 solar panels that together can generate up to 1.7 million kilowatt-hours (kWh) per year.

What type of program is this? Community solar programs harness natural energy from the sun and often cost less than installing a solar system at your home or business. If you are a homeowner, participating in community solar keeps you from having to worry about zoning restrictions or appealing to your homeowners' association.

The community solar model is easy to understand. You purchase a share of the energy produced, similar to taking out a subscription. The energy is distributed to the power grid, and subscribers receive credits that lower their electric bills. Most of all, you benefit by helping to put clean energy on the grid.

Participating in a community solar program also eliminates maintenance costs and concerns that can be irritating for those who own and maintain their own residential solar system. With community solar, your electric cooperative takes care of installation, maintenance, and all ongoing costs, making it easy for members to participate.

We're currently doing the planning and preparation work necessary for us to effectively implement the program. Once that's done, we can begin signing up subscribers. In the meantime, visit spartansolar.com for updates.

We're excited to offer members this opportunity to help build a cleaner energy future. It's another way we're looking out for you. See page 17 for more information on the solar project. ■



Co-op Members Win Prizes

Beth Baldwin, of Brohman, is the grand prize winner of an LED TV in a random drawing that was part of Great Lakes Energy's Co-op Month celebration. Christine Trevino, of Hesperia, won second prize, which is \$100 worth of LED lights. Third prize, \$50 worth of LED lights, went to Margaret Wilder, of Fountain.

Thank you to the hundreds of Great Lakes Energy members who entered and also took advantage of our energy-saving gifts giveaway. Continue to save by visiting michigan-energy.org for news on current energy-saving rebate offers. ■



2016 'Pay My Bill' Photo Contest Winner

Terry Euper, of Hersey, is the 2016 winner of Great Lakes Energy's Pay My Bill Photo Contest. The winner received a credit up to \$200 that was applied to the Great Lakes Energy member's December 2016 electric bill. The winning photo above was selected in a random drawing of all entries that appeared in *Michigan Country Lines* in 2016, and was published in the July/August issue. Thank you to the many GLE members who participated. Members are welcome to send in photos for our 2017 contest. See page 9 for details.

No Increase In PSCR Charge

For the second straight year, there will be no increase in 2017 in the Power Supply Cost Recovery (PSCR) charge for Great Lakes Energy's residential and seasonal members.

The PSCR factor will remain at 1.65 cents per kilowatt-hour (kWh). A member who uses 1,000 kWh in a month would pay a \$16.50 PSCR charge.

The purpose of the PSCR factor is to collect only what is needed each budget year to cover our power supply costs from our power supplier, Wolverine Power Supply Cooperative. Its generation and transmission costs can change frequently and unexpectedly throughout the year.

More than 60 percent of an average year-round member's bill covers power supply costs.

The PSCR is a pass-through cost and does not contain margins/profits for GLE. All funds collected for the PSCR go directly to our power supplier to help provide stable and reliable power for members.

Most other Michigan electric utilities have a similar charge that adjusts for power supply cost fluctuations on electric bills.

NO BARRIERS

ADVENTURES FOR RURAL VETERANS—APPLY BY JAN. 31

Michigan electric cooperatives believe there should be “No Barriers” for veterans with disabilities. That’s the name and idea behind CoBank’s No Barriers initiative. Michigan cooperatives are looking for qualified veterans* from our local community to participate.

No Barriers is a five-day, all-expenses-paid, expedition in Colorado, designed to help veterans with disabilities transform their lives through curriculum-based experience in challenging environments (climbing, rafting and hiking).

If you are a disabled veteran, or you know of a disabled veteran in our community who would like to participate in the No Barriers program, please complete the form on our website:
countrylines.com/nobarriers

**Must have VA disability rating to be eligible.*



Storm Watch: Plan Ahead And Be Prepared

When winter temperatures drop and storms hit, it can be challenging to stay safe and warm. Your electric cooperative cares about your safety, and we want you to be prepared. Heavy snow and ice can lead to downed power lines, leaving you without power. During a power outage, our crews will continue to work as quickly and safely as possible to restore power, but there are a few things you can do to prepare yourself.

Winterize Your Home

- Inspect and maintain heating equipment and chimneys to ensure they’re working safely and properly.
- Caulk and weather-strip doors and windows to stop air leaks and related heat loss.
- Freezing temperatures can cause water pipes to burst. Wrap pipes with insulation or newspapers and plastic. Allow faucets to drip during extreme cold to avoid frozen pipes.
- Consider installing storm windows for better insulation. From the inside, windows can also be covered with plastic.

- Make sure everyone knows where the fire extinguisher is and how to use it. House fires occur more often in winter, especially from using alternative heating unsafely.

Stay Warm And Safe

Plan ahead for alternate heating or other places you can go. A fireplace, propane space heater or woodburning stove is sufficient. Fuel and wood-burning heating sources should always be vented and used with caution—make sure carbon monoxide and smoke detectors are working. If you use a portable generator, make sure it is placed outside the home for proper ventilation. Be careful not to overload it, and use a proper outdoor extension cord that can handle the electric load.

Visit ready.gov or call 1-800-BE-READY (1-800-237-3239) for more tips on preparing for winter storms. ■



ELECTRIC CO-OPERATIVE
YOUTH TOUR



Michigan Co-ops Inspire Tomorrow's Leaders Today With **YOUTH TOUR 2017**

An exclusive summer highlight for the best and brightest youth in the state.
June 10–15, 2017

Designed to inspire the leaders of tomorrow, Youth Tour teaches the brightest students of Michigan about their past—and helps equip them with the skills they need to be Michigan's next generation of energy-minded leaders. This is a once-in-a-lifetime, all-expenses-paid leadership travel opportunity for high school sophomores and juniors (going into their junior or senior year this summer) and is sponsored by Michigan's electric cooperatives. From the battlefields of Gettysburg to the halls of Congress in Washington, D.C., the program explores the leadership lessons of our nation's history and will immerse students in the cooperative spirit.

Youth Tour offers a unique opportunity to build leadership and public speaking skills, enhance students' knowledge of the cooperative form of business, and build life-long friendships with other student-leaders from across the country.

**Youth Tour applications accepted
between now and Feb. 28.**

Trip Highlights Include:

- Visit the Gettysburg Civil War battlefields
- See Fort McHenry, birthplace of "The Star Spangled Banner"
- Explore the Washington, D.C., monuments and memorials
- Attend a theater performance at the Kennedy Center
- Explore the museums of the Smithsonian Institution
- Pay respects at Arlington National Cemetery
- Meet with Michigan Senators and Congressmen
- Batter up! Enjoy a Washington Nationals baseball game

**Additional information and online application
are available at CooperativeYouthTour.com.**

Agribusinesses: Save Energy And Money Now

Reducing the amount of energy used to power your farm equipment is a smart way to cut costs. Upgrade your outdated equipment today to save energy and receive cash incentives from the Energy Optimization program.

Rebates For Energy-Efficient Products And Equipment

Receive cash back when you purchase and install energy-efficient measures, such as: low-energy livestock waterers, fans and controls, milk-handling equipment, variable speed pumps, dairy refrigeration tune-ups, lighting upgrades and controls, water heaters, and more.

Farm Energy Audit

The Energy Optimization program has partnered with the Michigan Farm Energy Program (in conjunction with Michigan State University

Extension) to offer a \$500 rebate toward the cost of a farm energy audit. The audit will help you identify where and how to implement practical, energy-saving alternatives to outdated, inefficient equipment.

Rebates For Custom Projects

Have an energy efficiency project in mind, but don't see it on our list? The Energy Optimization program provides rebates for innovative and unique energy efficiency projects designed to meet specific needs, such as long-day lighting systems, milk harvesting and cooling equipment, high-efficiency, in-floor radiant heat, and more.

These are just a few of the energy-saving offers currently available for Michigan agribusinesses. View all farm services incentives at michigan-energy.org or call 877-296-4319 for details. ■



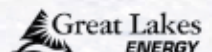
Farm savings for the long haul

Reduce your energy use and costs now and into the future! The Energy Optimization program provides cash incentives for installing energy-saving lighting, fans, controls, pumps, compressors, and more.

ENERGY TIP: Custom rebates are available for large or complex projects unique to your agribusiness.

ONLINE: michigan-energy.org

PHONE: 877.296.4319



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

Wild Weather



Our Photo Contest Is Now On Facebook!

Your response to our photo contest has been amazing. We've been getting so many submissions, we wanted to give you all a chance to weigh in on which photos get printed. You can now vote for your favorite photo on our Facebook page. The photo with the most votes will be printed in *Michigan Country Lines* and be entered to win a credit of up to \$200 on their December 2017 bill.

Our January theme is **Family**. Photos can be submitted between **January 1 to January 20**. The photo with the highest votes will appear in the March issue of *Michigan Country Lines* along with some of our other favorites.

Ready to submit? Just visit [Facebook.com/greatlakesenergy](https://www.facebook.com/greatlakesenergy) and click "Photo Contest" from the menu tabs. Not on Facebook? You can also enter the contest at [gtlakes.com/photocontest/](https://www.gtlakes.com/photocontest/). Make sure to vote, and encourage others to vote for you, too!



An aerial view of people walking out on frozen Lake Michigan at Grand Haven State Park. Taken during the deep freeze of February 2014. By Sue Van Liere, Middleville



Storm with winds and waves hitting the Lighthouse in Charlevoix. By Julie Christiansen, Charlevoix



A November gale brings 10-foot waves to Iron Ore Bay on the south shore of Beaver Island. By Fred Payne, Beaver Island



Double rainbow. By Dawn Mundri, Petoskey



Severe wind and rain storm damage. Winds took down a large tree into one of our horse barns. By Tina Tippet, Harbor Springs



Mother Nature showed up in full force last spring with hail, lightning and damaging winds, putting on an incredible show. By Lynn Fabbo, Gaylord

HEALTHY LIVING

Great tasting, good-for-you recipes.

Energy Bars

Joyce Tamminga,
Great Lakes Energy

- 1 cup peanut butter, sunflower butter or almond butter
- $\frac{2}{3}$ cup honey
- 3 cups rolled oats
- $\frac{1}{2}$ cup ground flaxseeds or chia seeds
- $\frac{2}{3}$ cup mini chocolate chips
- 1 cup any combination of nuts, seeds, and soft dried fruit (sunflower seeds, raisins, dried cranberries, etc.)
- shredded coconut

Combine the peanut butter and honey in a large mixing bowl and stir until smooth. Gradually add oats and chia seeds/flaxseeds. Add chocolate chips and nut/seed/fruit mixture. Mix gently to combine. Use a 7x11 or 9x9 pan sprayed with baking spray. Sprinkle bottom with coconut, pat down mixture firmly, and sprinkle more coconut on top and pat down. Refrigerate and cut into small bars. Enjoy for a healthy snack! Keep refrigerated.



Fresh Corn Salsa

Mary Babcock, Thumb Electric



- 2 cups corn kernels, fresh or frozen
- ½ cup red onion, diced
- ½ cup red pepper, diced
- 1–2 jalapeños, seeded and minced
- ½ cup cilantro, chopped
- 4 teaspoons lime juice
- 1 teaspoon kosher salt

Sauté corn over medium-high heat until kernels begin to char. Set aside to cool. In a medium bowl, combine onion, red pepper, jalapeño, cilantro, lime juice, and salt. Add sautéed corn and stir to combine. Enjoy with fresh chips!

Overnight Oatmeal (Muesli)

Mary Ellen Wynes, HomeWorks Tri-County



- ½ cup oatmeal
- ½ cup yogurt (your choice)
- any fruit
- any nuts
- any fruit juice

Combine your oatmeal and yogurt. Add your fruit juice, nuts and fruit. Stir and refrigerate overnight. Enjoy in the morning!

Delicious And Healthy Avocado Pudding

Cindy Dickinson, Presque Isle Electric



- 1 ripe avocado
- 2 tablespoons cocoa powder
- 2 tablespoons maple syrup
- 2 tablespoons almond butter or peanut butter
- pinch of salt
- chocolate chips

Mash avocado in bowl until smooth. Stir in rest of ingredients. Chill 30 minutes or more. Sprinkle chocolate chips on top as garnish.



Gather Round The Co-op Kitchen Table

Join our exclusive online cooking community to submit your recipes and try recipes from other members.

Please submit your favorite recipe for a chance to win a \$50 bill credit and have your recipe featured in *Country Lines*:

“Muffins & Breads” due Feb. 4

“Breakfast & Brunch” due Mar. 4

Enter your recipe online at micoopkitchen.com or send to (handprint or type on one side, please): *Country Lines* Recipes, 201 Townsend St., Suite 900, Lansing, MI 48933. Please note the co-op from which you receive your electric service.

Go to micoopkitchen.com to register.

GLE Awards More Than \$22,000 In Learning Grants

For the fifth year in a row, Great Lakes Energy showed support for local communities through its Touchstone Energy Classroom Grant Program. Grants totaling approximately \$22,200 were awarded to 13 school districts in the GLE service area to promote learning, innovation and technology in the classroom.

Classroom grants awarded for the 2016–2017 school year include:

- **Allegan Public Schools (for North Ward Elementary and Dawson Elementary):** \$1,885 for Osmo iPad educational game package.
- **Boyne City Elementary:** \$253.60 for Waves & Sound scientific lab stations.
- **Daisy Brook Elementary, Fremont:** \$1,925.47 for Dot & Dash robot program and four Kindle Fires.
- **Grant Christian School:** \$2,000 for 25 tablets with programs to enhance language, math and science skills.
- **Kalkaska Middle School:** \$1,999.65 for 35 Kindles and e-books to create a digital library.
- **Morley Stanwood Elementary:** \$1,973.90 for robotics and coding materials.
- **Newaygo Middle School:** \$2,000 for technology tools for scientific data collection, analysis and visualization.
- **Page Elementary, Middleville:** \$2,000 for the creation of a Makerspace in the classroom.
- **Pentwater Public Schools:** \$1,953 for MiniOne™ System used in a hands-on DNA biotechnology process.
- **Petoskey High School:** \$479 for the iPad Air and Plickers app to better assess students' comprehension levels of subject matter.
- **St. Mary Cathedral School, Gaylord:** \$2,000 to help cover the cost of SMARTBoard and projector.
- **St. Mary School, Big Rapids:** \$1,900 for 3-D printer and printing cartridges to produce prosthetic hands for Haitian children.
- **West Shore Educational Service District, Ludington:** \$1,897.23 for iPads and apps to help nonverbal students communicate.

Preference was given to projects and programs involving the use of technology or tangible equipment that enhance learning and are not currently being funded through the school's budget.

Touchstone Energy cooperatives serve members in 46 states with a commitment to integrity, accountability, innovation and commitment to communities. More information can be found online at gtlakes.com. ■

New! Report Outages Online

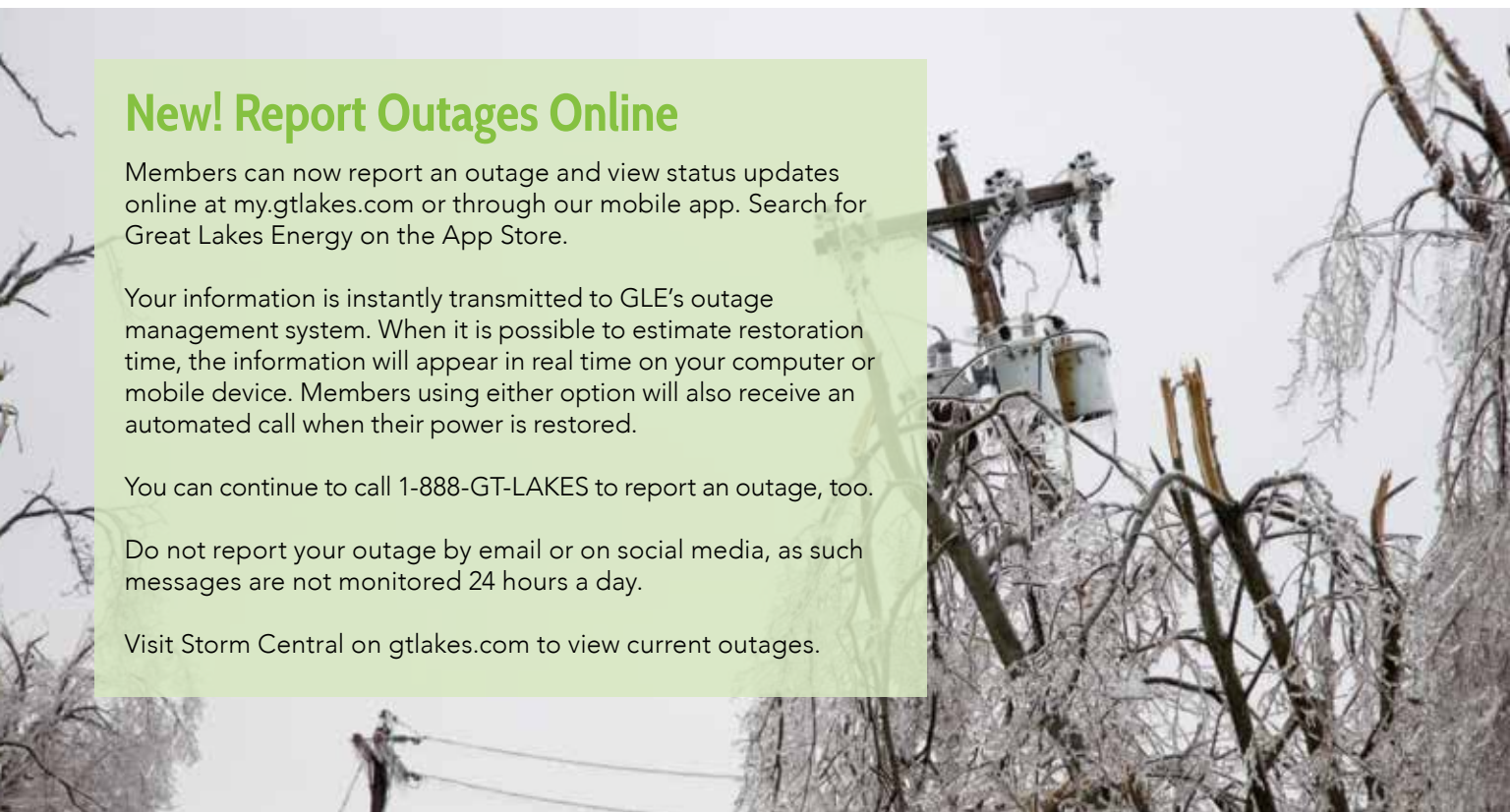
Members can now report an outage and view status updates online at my.gtlakes.com or through our mobile app. Search for Great Lakes Energy on the App Store.

Your information is instantly transmitted to GLE's outage management system. When it is possible to estimate restoration time, the information will appear in real time on your computer or mobile device. Members using either option will also receive an automated call when their power is restored.

You can continue to call 1-888-GT-LAKES to report an outage, too.

Do not report your outage by email or on social media, as such messages are not monitored 24 hours a day.

Visit Storm Central on gtlakes.com to view current outages.



Take Advantage Of Heat Pump Discounts

A lower kilowatt-hour (kWh) rate is available for qualifying ground or air-source heat pumps that can comfortably heat and cool your home.

The rate rewards Great Lakes Energy members who have an efficient electric heating system with a three cents per kWh energy credit. This credit is available year-round for qualifying ground-source heat pumps. Qualifying air-source heat pumps will receive the credit only during the heating season (bills rendered November through May).

Electric heat pumps must meet the following minimum standards:

Geothermal System — minimum requirements of EER 17.1 COP 3.6 for closed loop water-to-air; EER 21.1 COP 4.1 for open loop water-to-air; EER 16.1 COP 3.1 for closed loop water-to-water; EER 20.1 COP 3.5 for open loop water-to-water; EER 16 COP 3.6 for direct geoechange.

Air-Source Heat Pump — minimum requirements of HSPF 8.5, EER 12.5, & SEER 15 for split systems and HSPF 8, EER 12 & SEER 14 for package systems.

The heat pump must be wired to a second meter to receive the kWh discount.

Ask us about the three cents/kWh credit and rebates up to \$500 that are available for qualifying heat pumps. Call 888-485-2537, ext. 8957, for more information or email us at glenergy@glenergy.com.

Additional rebates up to \$500 are available through our Energy Optimization program. Visit michigan-energy.org or call 877-296-4319.

Great Lakes Energy does not sell or install heat pumps.

Visit earthcomfort.com, sponsored by the Michigan Geothermal Energy Association, for more information about heat pumps and dealers in your area. ■



Who Are Your Directors?

Your electric co-op's directors are Great Lakes Energy members just like you.

Dale Farrier knows the importance of maintaining a vital service to his community. He is office manager at the Antrim County Road Commission and serves on the Great Lakes Energy Cooperative Board of Directors. In both duties, he's part of a team of dedicated people who are called to work long hours in hostile weather to keep the roads open and our lights on.

That's the cooperative difference. ■



MILLER FAMILY FARM

— A LEAP INTO — UNCHARTED WATERS

By Yvonne Whitman

After a long career in the construction business, Rob Miller, then a Madison, WI, resident, found himself at a crossroad when he lost his job during the 2008 economic downturn. During this time, his son, Jake, was working for a vegetable farmer. Jake's work in the agriculture industry piqued Rob's interest in how foods were being grown. "I realized that food is a commodity that will never go away," Rob says. It was a realization that steered him and Jake to investigate alternative methods for farming. "And that led us to aquaponics," Rob explains.

Aquaponics is the marriage of aquaculture (raising fish) and hydroponics (the soilless growing of plants) that grows fish and plants together in one integrated system. The fish effluent provides an organic food source for the growing plants, and the plants provide

a natural filter for the water in which the fish live. This environmentally-sustainable method of farming is free of pesticides, herbicides, and fertilizers, plus it uses just one-tenth of the water expended in traditional field growing methods.

The Millers began working with Nelson and Pade, a Wisconsin aquaponic company, to learn everything they could about the technology. When trying to decide where to locate their operation, the decision was easy. "When I was a kid my favorite spot was Michigan's Upper Peninsula to visit my grandparents. I love it up here," Rob reflects.

In 2013, Rob, his wife, Dawn, and their three children all took a leap of faith into uncharted waters and moved their family to a seven-acre farm in Carney. Once owned by his maternal great grandparents, the farm is currently owned by Rob's parents, Fred and Sandy. Purchasing a nearby additional 60 acres, Rob began construction on the first building for the aquaponic operation.

In 2016, the farm was recognized as one of three finalists in the Governor's Energy Excellence Award for Best Project in the Agriculture sector.



Tilapia are a critical component to the farm. Jake is holding a fish in front of one of the farm's six fish tanks. Each carefully monitored 500-gallon tank holds approximately 250 fish.

The first shipment of 276 tilapia fish were delivered in 2014. It took them approximately one year to get the system operating at full capacity, growing both fish and produce. So, how does it work? The nutrient-rich water from the fish feeds the 200 lettuce seeds that are planted every day, six days of the week. Approximately 40 days later, the crop is harvested and ready to sell. The farm now produces several types of lettuce, kale, tomatoes and cucumbers. The produce is sold in 10 U.P. grocery stores, in addition to supplying healthy food to the Carney and Gladstone school lunch programs. This has all been accomplished with little to no advertising, but rather through word-of-mouth publicity. The quality of the produce advertises for itself, the Millers attest.



Rob Miller proudly stands in the rows of his impressively tall tomato plants.

Photos—Emily Prehoda

Still in its infancy, the operation will reach full capacity in five years when it is expected to produce 60,000 heads of lettuce and 70,000 pounds of tomatoes annually. Future plans include a certified kitchen on-site, so that they can sell the fresh fish, as well as constructing more greenhouses for crops, such as strawberries and peppers.

Family involvement weaves its way through the fabric of the farm with Rob's son, Jake, handling fish operations, his daughter, Hannah, as a greenhouse technician, and son, Jon, as general help. Rob's wife, Dawn, initially a bit reluctant at the prospect of relocation, adds, "Now that I'm up here, I love it. I love working on the farm. I've always enjoyed gardening, and this is just gardening on a different level."

"I have to attribute all of this to my mom and dad," Rob thoughtfully acknowledges. "They have been entrepreneurs their entire lives, and they taught by example. I saw first-hand their successes and failures and how they got through them. Those sorts of life lessons helped me through my own trials and errors with this business."

Together, as a family, the Millers have traversed uncharted territory to be able to supply fresh, sustainable food throughout the U.P.'s four seasons.

Miller Family Farm is a member of Alger Delta Cooperative Electric Association. For more information on the farm, contact them at 906-639-2506, millerfamilyfarm2013@gmail.com or eatupmichigan.com. 🐟

VEGETARIAN MINESTRONE

A Miller Family Farm Favorite

- 2 tablespoons olive oil
- 1 teaspoon garlic, minced
- 1 large onion, finely chopped
- ¼ cup celery, diced
- 1 cup carrots, peeled and sliced into thin half moons
- 1 cup fresh mushrooms, sliced
- 1 teaspoon basil
- 1 teaspoon oregano
- 2 tablespoons chicken flavored seasoning (vegetarian)
- 6 cups boiling water
- 1 teaspoon steak sauce
- ½ teaspoon Worcestershire sauce (Annie's vegetarian)
- 12 ounces fresh kale, chopped
- 3 ½ cup tomatoes, crushed
- 4 cups spaghetti sauce (homemade or store bought)
- 3 ½ cups navy beans canned (drained & rinsed)
- 1 ½ cups zucchini, cut into small bite size
- 2 cups ditalini, cooked (or other small pasta)
- salt and pepper to taste

Heat oil in a large soup pot. Add onion, garlic, celery and carrots. Sauté 2–3 minutes until onion is translucent. Add mushroom, oregano and basil and cook 2 minutes over medium heat or until mushrooms are softened. Prepare broth by dissolving vegetarian chicken seasoning into boiling water, then add to pot with onion mixture. Add steak sauce, Worcestershire, kale, tomatoes, spaghetti sauce and beans. Bring to a boil, then simmer for 10–20 minutes, add zucchini and cook 10 more minutes or until zucchini is tender. Adjust seasoning with salt and pepper, then add the cooked pasta. Remove from heat and serve. Makes about 1 gallon.



Find this recipe and more at **micoopkitchen.com**.

Manage Your Online Passwords



Mike Youngs
Great Lakes Energy
Business Security &
Networks Director

Welcome to my first cyber security column in *Michigan Country Lines*! We regularly hear stories about a new data breach or another company that was the victim of a malicious cyber attack. Perhaps you or someone you know had to cancel a credit card because it was stolen. Even more problematic, maybe you were the victim of identity theft.

Cyberspace can be a dangerous place, but with just a few simple tips it can be navigated safely.

One of the most important aspects of cyber security is proving who you are to a faceless computer. So how do we do that? The most common way is through the use of a secret password that only you should know. Whether you are tapping in a pin code to unlock the smartphone in your hand, or logging into a social networking website that might be located halfway around the world, you are basically telling a computer, "Hey! This is me! Let me see my stuff."

This method works as long as no one else can guess or steal your secret password. And to do that, you have to make a strong, unique password—again, that only you know—to every one of the websites and devices you use. You might be thinking, "Wait a minute, I use dozens of websites. Maybe even a hundred. I have to memorize a unique password for all of them? And each one has to contain a number?"

I know that's a challenge. And judging by the number of data breaches disclosed almost daily, the majority of people don't do that. It is unrealistic to come up with dozens of unique, hard-to-guess passwords, so many simply use the same password over and over. This is a dangerous practice as all a malicious hacker has to do is look through the information disclosed in one of those data breaches and try whatever passwords they find on all other sites. Do you use the same password for *Yahoo!* as your bank?

So, how do I meet that challenge? I use password manager software to help me create, remember, and maintain passwords. Whoa, I'm up to over 250 passwords now!

Using a password manager is easy, and most work about the same way. You create one secret **master password** that can unlock all your other passwords stored in the tool. When I need to

login to a website, I first visit the website, enter in my username, and then open my password manager. Some password managers will recognize the website you are on and automatically fill in the username and password for you. Or you can simply copy and paste from the manager into the appropriate fields. I find this is much faster than typing in my password every time, too.

If you need to create or change a password on a website, most password managers will provide you with a button to create a long, random password. Just click **generate password** and you're done. In fact, I create all my passwords this way. Out of the over 250 in my manager, I only have about six memorized. That's it—I let the password manager do the rest of the work.

Which password manager should you choose? I do not recommend using any password manager built into a web browser. Some browsers do not store your password in a safe way, and none of them have the features a dedicated password manager has.

There are many good dedicated password managers out there. Dashlane, LastPass and KeePass are all good, although I do not specifically recommend any password manager. My best advice is to find one you like and use it.

That's it for now. I'll be back again with more tips on how to get the most out of the online world as safely and securely as possible. ■

Check Usage While Away

Here's an easy, convenient way to check electricity use in your home.

The amount of electricity you use daily can be viewed online by visiting my.gtlakes.com. Enter your username and password to login or register if you are a first-time user. Click on Usage History to see your monthly and daily kWh consumption.

Contact our office for your daily usage records if you don't have internet service.

This metering technology is another way that we're looking out for you.

Renewable Energy And LED Lighting Changes Approved

Tariff changes that expand the options available for Great Lakes Energy members interested in renewable energy and outdoor LED lighting were recently approved by the cooperative's board of directors.

Great Lakes Energy will begin to implement the changes in March.

Two renewable energy options, Community Solar and Buy All/Sell All Renewable programs, were added. Members can purchase a \$600 subscription for energy produced by the new community solar array near Cadillac. In return, they receive energy credits on their bills. A monthly payment plan to cover the subscription cost is also available. Under the Buy All/Sell All Renewable program, members who generate their own electricity with a qualifying renewable energy system can sell all the renewable

energy they generate back to Great Lakes Energy for 10 cents per kilowatt hour.

Changes in the existing net metering program for participating members who generate their own power with a renewable energy system were also made.

Members will be able to have GLE install an outdoor energy-efficient LED light on their property for less cost. The upfront one-time fee to cover the added expense for an LED light will be eliminated. In addition, a 70 watt LED alternative to the 150 watt high pressure sodium light will be added to the other outdoor LED lights available at a charge of \$11 per month.

Please see notice on this page for other changes and details. Contact our office for more information. ■

Notice to Members of Great Lakes Energy Cooperative Tariff Changes Effective March 1, 2017

Pursuant to the Electric Cooperative Member Regulation Act (Act 167 of 2008), Great Lakes Energy is providing notice of the following tariff changes approved by its board of directors for bills rendered no earlier than March 1, 2017:

Renewable Energy Options

1. Community Solar Program: Receive 10 cents/kWh for actual energy produced by a single panel of a community solar array for a subscription fee of \$600 to be paid in full or split into \$10/month payments.
2. Buy All Sell All Renewable Program: Receive 10 cents/kWh for all energy produced from an interconnected renewable energy generator up to 1 MW.
3. Net Metering/Distributed Renewable Energy Program: New accounts receive 5.6 cents/kWh for excess energy generated by your interconnected renewable generator up to 20kW placed on GLE's distribution system. Existing accounts under 20 kW will have the option to extend the current retail rate credit for up to 20 years from the date of their original contract or convert to option 2. Net metering rates for systems exceeding 20 kW will be offered option 2.

Renewable Energy Options listed above will expire December 31, 2019, or sooner if the 10MW cap is reached with the power supplier before that date. Contracts are required for all options.

Outdoor Lighting Options

1. Remove Experimental Emerging Lighting Technology Provision and transition to permanent LED lighting options.
2. Remove up-front installation charge for LED fixtures.
3. Add 70 watt LED Alternative to 150 Watt HPS fixture at \$11/mo.

Miscellaneous

1. Clarify definition of "permanent dwelling" to include county approved well or septic system.
2. Revise Power Supply Cost Recovery Clause definitions and provisions that are no longer applicable under member regulation.

Sky's The Limit

By Jack O'Malley

What happens when you combine a master electrician, educator, licensed contractor and self-described tinkerer? You get Mike Schmerl, an instructor at Northwestern Michigan College and owner of Panoramic Electricity.

Since starting his electrical company 23 years ago, Mike has made the study of electricity something of a hobby, fueling the fiddler within while inspiring a new generation of electricians. In fact, one of Mike's electrical apprenticeship classes was awarded a grant to study solar power. With his home now covered in solar panels, wired with various switches and batteries, Mike uses his personal experiences with this alternative energy source in the classroom. And his students seem to be warming to the idea.

"Solar has amazing benefits," Mike said. "We are much further along in its day-to-day use than people even know." An electric car, for instance, can run approximately 238 miles between charges. Mike says, "that pretty much covers the average day driving for most of us."

But what happens when you combine an electric car with solar power? Mike discovered you can have an affordable and comfortable means of transportation as proven by the solar powered golf cart he built! And while he admits some working vehicles might still need gas or diesel fuel to operate, Mike remains confident that soon we'll be picking up groceries in electric powered cars.

Some argue that Michigan's often cloudy, overcast skies make solar impractical. Mike insists that's not true. He cites Germany, a country sharing its latitude with Michigan, as a global leader in solar energy. While acknowledging that solar might not be the total solution to man's energy needs, Mike



says sun power complements other energy forms, pointing out that "even oil companies see the value of finding alternative energy sources so as to extend their production life."



Jack O'Malley

Describing solar power as the perfect marriage of old and new technology, Mike understands many of us will never be truly off the grid. "We will always need bigger generating capacity to power an ever-growing infrastructure," Mike explained. "If you want a hot tub or larger appliances, you will always need the power grid." ■

I Remember...

We invite members to share their fondest memories.
Country Lines will pay \$50 for stories we publish.

Guidelines

1. Approximately 200 words
2. Digital photos must be at least 600 KB
3. Only one entry per household, per month
4. *Country Lines* retains reprint rights
5. Please include your name, address, email, phone number and the name of your electric co-op
6. Submit your memories online: countrylines.com



«« Where In Michigan Is This?

Identify the correct location of the photo on the left and be entered into a drawing to win a \$50 electric bill credit. Enter your guess at countrylines.com or send by mail to: *Country Lines* Mystery Photo, 201 Townsend St., Suite 900, Lansing, MI 48933. Include the name on your account, address, phone number, and the name of your co-op.

Our Mystery Photo Contest winner from the November/December 2016 issue is Cathy Kinzey, a Great Lakes Energy member who correctly identified the photo as The Blue Buck on 72, a specialty market in Kalkaska.

Winners are announced in the following issues of *Country Lines*: January, March, May, July/August, September and November/December.





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