

A Service of **Thumb Electric Cooperative**

January/February 2014

Michigan COUNTRY LINES



Shaggy's Company Skis to Success

4 'Fracking' Regulations

5 Co-op Election Notice

12 Energy-saving Resolutions

1.



ABANDONS ALL-OF-THE ABOVE

The Administration is reversing course: ditching our **All-of-the-Above** energy strategy for an **All-But-One** approach that bans new coal plants.

2.



TECHNOLOGY GAMBLE

New regulations essentially require technology that's **not commercially viable and prohibitively expensive**—leading to higher bills down the line.

TOP 4 FACTS

ABOUT THE EPA'S NEW CLIMATE REGULATIONS

3.



LIMITS ACCESS TO AFFORDABLE, DOMESTIC ENERGY

By banning new coal plants, Americans forfeit a **236-year domestic source of energy** with a historically stable price.

4.



HISTORY REPEATS: ALL-BUT-ONE DOESN'T WORK

A 1978 mandate prevented use of natural gas & forced utilities into coal or nuclear—before common sense prevailed and it was repealed 9 years later.



Visit **ACTION.COOP** today to send a message to the EPA

January 2014
Vol. 34, No. 1

Executive Editor
Casey Clark

Editor
Gail Knudtson

Publisher
Michigan Electric
Cooperative
Association

Michigan

COUNTRY LINES

IN THIS ISSUE

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

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

POSTMASTER: SEND ALL UAA TO CFS.

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

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

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

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

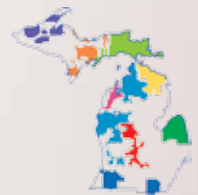
Change of Address: Please notify your electric cooperative. See page 4 for contact information.



ON THE COVER

John (L-R), Shari and Jeff Thompson have made over 1,000 pairs of skis at their family shop, Shaggy's Copper Country Skis, in Boyne City. Featured are their "Brockway" model, and the best-selling "Tubby" (red) all-mountain ski. They have also started making skateboards, and are members of Great Lakes Energy Cooperative.

Photo - Roger Boettcher, Leavenworth Photographics



Michigan's Electric
Cooperatives
countrylines.com

6

HOME COOKING

Cooking for One

Christin McKamey
& Our Readers



7

OUR ENERGY

Generation Series: Time-Tested Renewable Hydropower



10

COVER STORY

Shaggy's Makes Cool Skis

Mike Terrell



13

SAFETY

How to Stay Safe With Electricity: At-home & Away

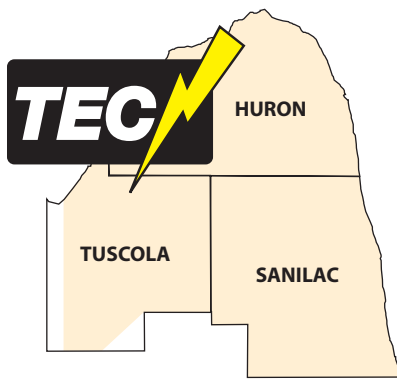


14

READERS' PAGE

Ramblings, Mike Buda, Quilt, Mystery Photo, Letters





Thumb Electric Cooperative

2231 Main Street
Ubyly, MI 48475-0157

1-800-327-0166 or 989-658-8571

E-mail: tec@tecmi.coop
www.tecmi.coop

BOARD OF DIRECTORS

HURON COUNTY

Randall Dhyse Treasurer
Kinde

Beth McDonald Secretary
Bad Axe

Donald Wolschleger Vice President
Harbor Beach

SANILAC COUNTY

Leonard Briolat Director
Ubyly

Kim Nunn Director
Croswell

Duane Kursinsky Director
Sandusky

TUSCOLA COUNTY

Carl Cousins Director
Millington

Karl DeSimpelare Director
Unionville

Louis Wenzlaff President
Kingston

Dallas Braun General Manager

PAYMENT STATIONS

Huron County

Bad Axe – Northstar Bank
Pigeon – Northstar Bank

Tuscola County

Akron – Northstar Bank
Caro – Northstar Bank
Mayville – Mayville State Bank
Millington – Mayville State Bank

Visit Thumb Electric's website:
www.tecmi.coop

MDEQ to Update 'Fracking' Regulations

Your electric co-op is not involved with "fracking," but I wanted to share the following article from the Michigan Department of Environmental Quality (DEQ) with you for a couple reasons.

First, fracking and the resulting extraction of these reserves of natural gas results in lower costs to produce electricity from gas-fired generating facilities.

Secondly, there are many property owners in the Thumb Area that have already leased or are contemplating leasing their property for gas exploration. Fracking has been used safely for decades, and with the abundant reserves of gas under our feet, I am sure this will be a front burner issue for awhile.

What Michigan's DEQ Says

The DEQ reports that it is crafting new rules for hydraulic fracturing (a process commonly used to develop natural gas and oil wells), with a central focus on increased public reporting and water quality monitoring. Specifically, the report states:

"Hydraulic fracturing, also called fracking, involves pumping water, sand and chemicals into a drilled oil or gas well, then sealing and pressurizing it to crack layers of rock far below the surface and release gas and oil."

The process is used to maximize oil and gas production and access oil and gas reserves not available through conventional drilling alone.

Fracturing was first employed in Michigan in 1952 and has been used by oil and gas companies on more than 12,000 wells throughout the Lower Peninsula with no recorded incidents of contaminating groundwater.

Michigan has some of the nation's most protective regulations governing oil and gas development. The DEQ periodically updates its regulations to reflect changes in technology and industry.

Agency leaders have been working throughout the past year with residents and stakeholders from the environmental community to better understand key concerns. DEQ regulators have hosted or attended more than 200 public meetings around the state during the past two years."

"We heard loud and clear that there is a growing concern about fracturing," explains DEQ Director Dan Wyant. "We are proud of the DEQ's regulatory track record, but we want Michiganders to know that hydraulic fracturing is managed well when it is used in Michigan. These rule changes allow everyone to better understand fracturing, and how the DEQ is keeping Michigan's resources safe during gas and oil development."

The proposed changes include four key areas:

1. Water withdrawal assessment and monitoring. Permit applicants will be required to use the state's water withdrawal assessment tool. Withdrawals will not be approved if the tool or a site-specific review indicates the withdrawal may cause an adverse impact to rivers or streams.

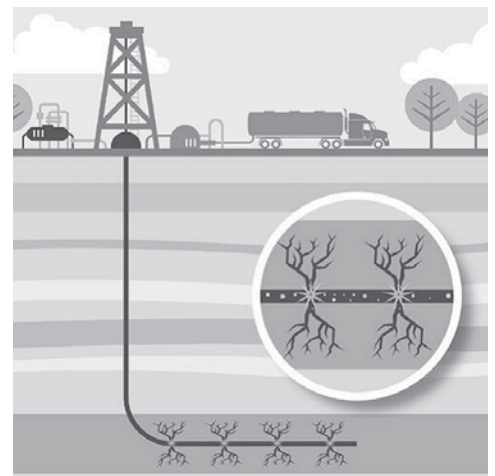
While use of the tool is required now by department policy to obtain a permit, several stakeholder groups asked that it be codified in regulations.

In addition, if there is a water supply well within 1,320 feet of a proposed withdrawal, the operator must install a monitor well and report water levels. The rules will set specifications for water storage pits.

2. Water quality sampling. Oil and gas operators will be required to collect baseline samples from up to 10 water supply wells



Dallas Braun
General Manager



Visit tinyurl.com/o2yfr8j or call the MDEQ at 800-662-9278 to learn about fracking and how it's regulated.



2014 Winter Tree-Trimming Schedule

Thumb Electric Cooperative's right-of-way clearing program will proceed as weather permits in **Sanilac County**:

All lines in Washington, Lower Sanilac, Buel, and Lexington townships; Downington and Maple Grove roads in Bridgehampton and Forester townships.

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

within 1,320 feet of gas and oil wells, six months or less before drilling operations begin. Many companies do this voluntarily now.

3. Monitoring and reporting. Operators will be required to: Identify whether high volume fracturing is expected to be utilized in permit applications for new wells; submit separate applications for HVHF operations on existing wells; notify the DEQ at least 48 hours before starting the operation; and, monitor and report fluid pressures and volumes for all HVHF operations.

4. Chemical additive disclosure. Operators will be required to submit information on chemical additives in a HVHF operation using the internet-based FracFocus Chemical Disclosure Registry. The information must include chemical constituents and maximum concentrations. The chemical family and trade name may be used for chemicals with trade secret protection under federal law.

Drafted rules are submitted to the state Joint Committee on Administrative Rules and go through a public review process. The DEQ expects to have the new rules in place this year.

Special Election Notice for TEC Members

In March 2014, a nominating committee of nine Thumb Electric Cooperative members will meet to select a slate of candidates for one director position in each of the three counties served by the cooperative.

Positions currently held by Carl Cousins, Beth McDonald and Duane Kursinsky will be voted on at the 2014 annual meeting.

Any co-op member interested in running for a district director position should write a letter to the Thumb Electric nominating committee chairperson prior to Feb. 10, 2014, indicating his or her interest in being nominated.

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

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



Annual Meeting Notice

Saturday, June 14, 2014

Cass City Recreational Park

Business meeting begins at 10 a.m.

New Appliances \$ave!

A new round of energy efficiency standards for various appliances and equipment approved by Congress will save consumers about \$900 billion on their utility bills by 2020, notes the U.S. Department of Energy.

For example, a refrigerator purchased today uses one-third of the energy a 1973 model did—but with 20 percent more storage. Since 1990, new clothes washers use 70 percent less energy and dishwashers 40 percent less.

From microwaves to lightbulbs and commercial freezers, these standards have benefited family budgets—and the environment. Since 1987, 1.9 billion tons of carbon dioxide emissions have been avoided. That's the same as taking 373 million cars off the road for one year.

In fact, despite a population increase from 233 million in 1983 to nearly 316 million today, per-home energy consumption has declined in the past 30 years. This is due to energy efficiency advances for space heating, air conditioning, and major appliances, notes the U.S. Energy Information Administration.

As Americans add more electronic gadgets (about 25 on average)—from rampant computer and large-screen TV use to more devices vying for wall outlets—every little bit helps when it comes to saving energy.

Visit michigan-energy.org or TogetherWeSave.com to learn more.



Cooking For One

Cooking for one?

These single-serving recipes will help you save time and energy, are easy to prepare, and sized perfectly for just you!

Burrata Caprese with Balsamic Glaze

1 small loaf of french bread, cut into 1-inch slices, toasted
7-8 grape tomatoes, cut in half
3-4 large basil leaves
1 container burrata (mozzarella filled with cream) or mozzarella cheese

Balsamic glaze:

1½ c. balsamic vinegar
½ t. honey

On a plate, arrange bread, tomatoes, basil, and burrata. For glaze, bring balsamic vinegar to a boil in a small saucepan. Reduce to a simmer, and cook until thick and syrupy. Remove from heat and stir in honey. Let cool completely before serving (it will thicken as it sets). You can also use store-bought balsamic glaze which is much easier. On each piece of

bread, spread the burrata. Add the balsamic glaze, a piece of basil, and top with 2 tomato halves. This is a quick, healthy meal that is perfect for one person. No cooking required.

Christin McKamey

Grilled Chicken Nachos

1 oz. baked tortilla chips
¼ c. drained, low sodium black beans, heated
4 oz. grilled lean boneless, skinless chicken breast, cut into small cubes

2 T. salsa con queso
3 T. chopped tomato
2 T. thinly sliced jalapeño pepper

Lay chips on plate. Top them evenly with the beans followed by the grilled chicken. Drizzle the salsa evenly over the top. Top with the tomato and jalapeño slices and serve. Serves 1.

Lorraine Green, South Boardman

Apple Crisp for One

1 T. quick cooking oats
1 T. brown sugar
½ T. flour
dash of cinnamon
dash of nutmeg
dash of salt
½ T. margarine
1 c. sliced, peeled apples

Combine oats, brown sugar, flour, cinnamon, nutmeg and salt. Cut in margarine with fork until crumbly. Set aside. Place apples in small microwave-safe dish. Top with oat mixture. Microwave on full power, uncovered, 2-4 minutes or until apples are tender, rotating dish once. Serve with frozen yogurt or ice cream, if desired.

Barb Spencer, Petoskey

Curried Chickpea Stew

1 t. olive oil
1 c. onion, diced
1½ c. carrots, diced
2 cloves garlic, finely dice
1½ -2 T. curry (depending on taste)
1 14.5-oz. can diced tomatoes
1 16-oz. can chickpeas
1½ c. water
1 cube chicken or vegetable bouillon
1 whole chicken breast cut into ½-inch pieces
1 T. butter
1 t. sugar

In a 4½-quart stock pot, add ½ c. water, carrots and onions. Simmer until carrots are tender. Add more water if needed, remove carrots and onions. Add olive oil and curry, and heat for 30 seconds or until bubbles appear. Add garlic, remaining water, tomatoes (juice and all), drained chickpeas, chicken



and bouillon cube. Stir until bouillon cube is dissolved. Simmer until chickpeas are tender. Add more water, if needed. Stir vigorously to thicken. Remove from heat, add sugar and butter, stir to dissolve sugar. Garnish with Greek yogurt (optional). This is a delicious, one-pot meal.

Jeff Ullen, Bellaire

Photography by: 831 Creative

Recipe Contest Winner!



Chris McAfee

Congratulations to Chris McAfee of Pointe Aux Pins on Bois Blanc Island. Her name was drawn from all readers whose recipes we printed in 2013 and *Country Lines* magazine will pay her

January electric bill as a prize.

Chris and her family have been members of Presque Isle Electric & Gas Co-op since the co-op brought electricity to the Island in 1964. She loves her piece of paradise with lots of wonderful people, miles of ATV trails, beautiful woods, and the surrounding crystal-clear water of Lake Huron.

Submit your recipe! Thanks to all who send in recipes! Please send in your favorite "**Easter**" recipes by **Jan. 10** and "**Hawaiian Luau**" recipes by **March 10**.

Mail (handwritten or typed on one side, please) to: Country Lines Recipes, 2859 W. Jolly Rd., Okemos, MI 48864; or email recipes@countrylines.com.

Contributors whose recipes we print in 2014 will be entered in a drawing and *Country Lines* will pay the winner's January 2015 electric bill (up to \$200)!



Visit recipe editor Christin McKamey's website, **veggiechick.com**, for healthy, vegetarian recipes and info!

HYDROPOWER

TIME-TESTED RENEWABLE ENERGY

This is fi th in a series on how electricity is generated. The first (January) was about coal, the second about new nuclear options (June), the third about wind (July-August), and the fourth about natural gas (October). Watch future issues for stories about other fuel sources.

Energy from fl wing water has been harnessed and used for over 2,000 years, beginning with the ancient Greeks using water wheels to grind wheat. In the 1880s, converting a rush of water into electricity became a reality in the United States.

Today, hydropower provides about 80,000 megawatts (MW) of capacity in the United States—enough to power over 25 million average homes—and accounts for about 75 percent of all renewable electricity used by co-ops.

But how does it work? Simply, hydropower converts the natural energy of moving water to mechanical energy, using a turbine that is attached to a generator. With these highly efficient turbine-generators doing the job formerly performed by water wheels, electricity fl ws in a number of ways:

Impoundment: When most people think of hydropower, dams come to mind. By plugging a river and amassing water in a reservoir, its fl w (and the resulting electricity) can be better controlled and generated as needed.

Diversion: Water is channeled away from a river, typically near natural falls, down to generators at the falls' base. This can be done without any visible impact to a river's natural course. In fact, this kind of generation was used to bring electricity to Buffalo NY, from Niagara Falls in the late 1800s.

Pumped storage: This method essentially uses off-peak electricity to make electricity for use during times of high consumption. Two reservoirs are filled, one typically uphill from the other, with an electric pump/

generator in between. At night, when demand is low and electricity less expensive, water from the lower reservoir is pumped uphill. During the day, when demand for power increases, that water is released down through the generator to make electricity.

Over 600 electric co-ops across the country buy power from 134 federally-owned and operated dams, most of which were built between the late 1930s and early '60s. Despite the incredible importance of these resources, maintenance has lagged in recent years and created room for improvement.

Electric co-ops are making efforts to address this problem, advocating that the government set aside funds to repair and maintain the dams and turbines. Researchers are also looking to create more efficient and fish-friendly ways to generate hydropower. Careful studies of aquatic environments have given dam operators a better idea of how to simulate a natural river downstream.

A 2012 report from the U.S. Depart-

ment of Energy (DOE) revealed many of the nation's dams hold untapped power. Roughly 2,500 provide conventional and pumped-storage hydropower in the United States. But the vast majority of dams—some 80,000, ranging from 4 to 770-feet-high—are non-powered. The DOE analyzed 54,391 of them.

Locks and dams on the Ohio, Mississippi, Alabama and Arkansas rivers—facilities owned and operated by the U.S. Army Corps of Engineers—offer the most untapped potential. The top 10 sites alone could provide about 3,000 MW.

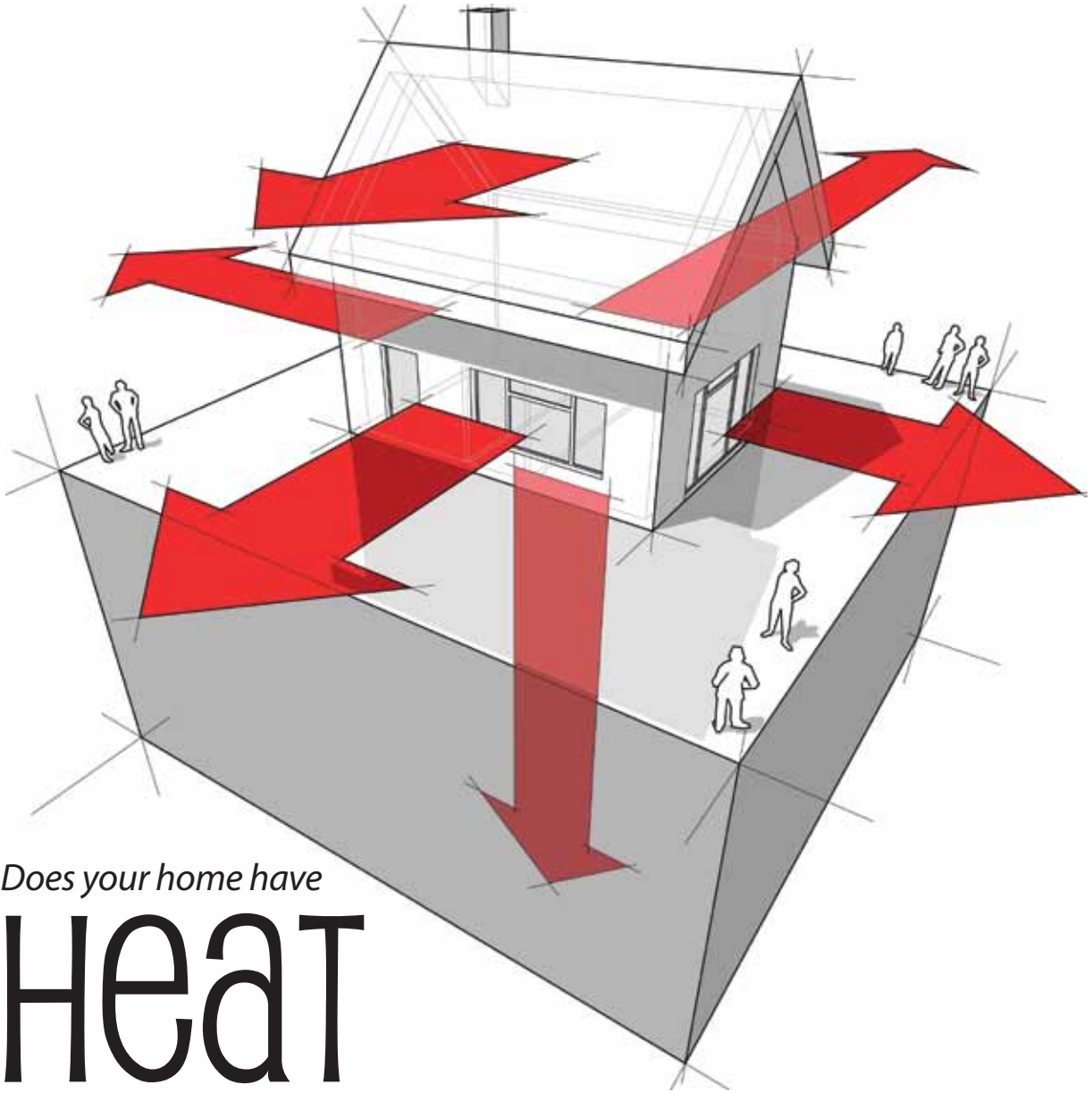
“Many of these dams could be converted to generate electricity with minimal impact to critical species, habitats, parks or wilderness areas,” the DOE report states.

Co-ops' efforts in pushing for increased maintenance and technology development will ensure that hydropower remains a reliable, affordable, renewable resource for decades to come.



Cloverland Electric Cooperative's hydroelectric plant in Sault Ste. Marie generates between 25 and 30 megawatts of electricity. Clean, renewable hydro makes up nearly 35 percent of the co-op's fuel mix. To see a recent chart showing what your electric co-op's fuel mix is, visit countrylines.com and click on the co-op name and then click the Sept. 2013 issue.

Photo Courtesy - Cloverland Electric Co-op



Does your home have

Heat LOSS? **Insulate and \$ave!**

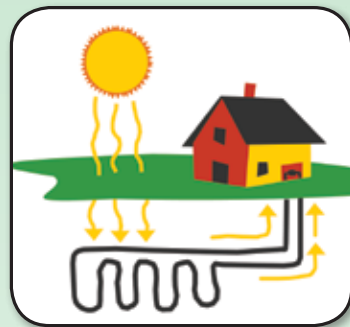
Call the energy experts at Thumb Electric Cooperative today for your free in-home analysis. We offer energy efficiency loans up to \$15,000 at 7 percent interest, payable over 7 years, to qualified members.



989-658-8571 or 800-327-0166

Renewable Geothermal Heat

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



All-Temperature Geothermal Systems
1103 E. Caro Rd., Caro, MI 48723
989-673-5557

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

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

Burkhard Plumbing & Heating
638 E. Huron Ave., Bad Axe, MI 48413
989-269-7532

Certified Temperature Innovations
3107 Custer Rd., Carsonville, MI 48419
810-300-7748

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

ES Sheetmetal, Gene Root
9450 Belsay, Millington, MI 48746
989-871-2067

Geo Renew Systems, Inc.
3045 Grange Hall Rd., #7, Holly, MI 48442
248-531-0325

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

Geothermal Systems of Lapeer, LLC
6689 Orchard Lk. Rd. #188
West Bloomfield, MI 48322, 810-240-2116

Holland Heating and Cooling
9160 Lapeer Rd., Davison, MI 48423
810-653-4328

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

J & B Plumbing & Heating
7641 Pigeon Rd., Pigeon, MI 48755
989-453-3931

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

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

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

Kundinger & Kroll
31 E. Main St., Sebawaing, MI 48759
989-883-2770

**Lakeshore Improvements
Plumbing & Heating**
7825 Big Gulley Rd., Palms, MI 48465
989-864-3833

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

NRG Control
3690 Washburn Rd.
Vassar, MI 48768
989-670-2543

Newton-Johnson Plumbing & Heating
114 Enterprise Dr., Vassar, MI 48768
989-823-2341

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

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

Priority Service by Porter & Heckman
3056 Davison Rd., Lapeer, MI 48446
810-644-8576

Shetler Plumbing & Heating
7184 Nitz St., Pigeon, MI 48755
800-547-3651

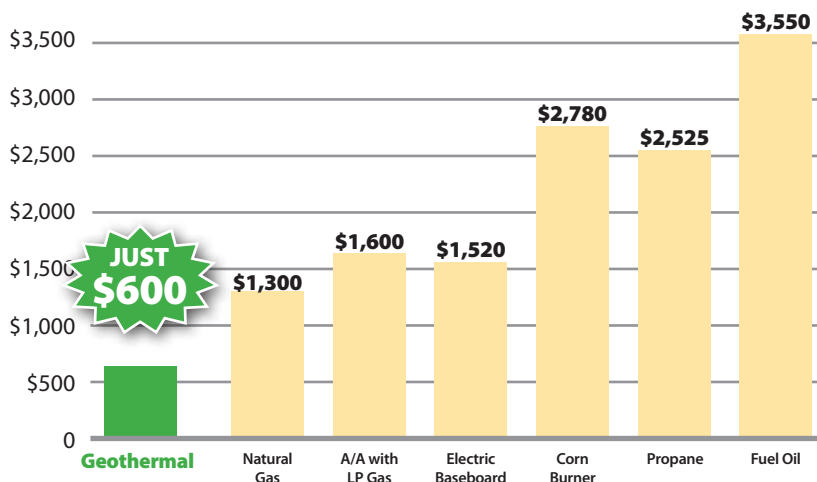
Superior, Inc.
3442 Cemetery Rd., Cass City, MI 48726
989-872-3305

Thumb Cooling & Heating
5599 Pochert Rd., Port Hope, MI 48468
989-428-4948
And: 837 South State, Caro, MI 48723
989-672-4948



Annual Operating Costs

For an Average 1,800 Sq. Ft. Home
(45,000 BTU heating load, 20,000 BTU cooling load)



Factors Used: **Electric Baseboard**, **Air-Source Heat Pump** and **Geothermal**—based on TEC's 6.353¢/kWh dual-fuel rate. **LP gas**—based on \$2/gal. and 90% efficient furnace. **Fuel Oil**—based on \$3.50/gal. and 80% efficient furnace. **Natural Gas**—based on \$1.08/therm., 90% efficient furnace including \$9/mo. service charge. **Corn**—based on \$8/bushel. (Electric baseboard and corn operating costs do not include air conditioning.)

Shaggy's Company Skis to Success

Like most kids, Jeff and Jonathon Thompson loved taking things apart and putting them back together, never thinking that their inquisitiveness might lead to a new family business.

They were teenagers when they first built a surfboard with the help of their dad, John. That winter, Jeff wanted to build a "ski bike" by cutting apart an old pair of Dynastar skis to attach to a bike frame. Noticing how

they were built in layers, the boys decided to build a pair of skis, too.

That was 2005, and that first pair of skis was not a successful start.

"We built them in a barn that was about 40 degrees, and discovered that it needs to be warmer for skis to cure in a press. My brother brought them to the U.P. for a race that winter right after they were made, and they de-laminated before we got them on

the slopes," laughs Jeff

Previously, the family had a successful construction business, building as many as 300 homes in some years before the economic downturn. "We had vacationed in the Boyne City area for years, and as the ski business started picking up and the building business slowing down, we decided to make the move from South Lyon, where we had lived for years," John adds. ●●●●●●●●●●



John (L) and Jeff Thompson, of Shaggy's Copper Country Skis, prepare materials that will be pressed into skis, including an ash wood core, Durasurf 4001 base, triaxial fiber glass, damping rubber strips, steel edges, ABS sidewalls, Durasurf tip/tail spacer, and a graphic topsheet.



If you want to demo a pair of Shaggy's skis, the Thompsons and their reps will be visiting Michigan ski areas this winter (check the schedule at sccskis.com or call 231-459-4323), or stop by their Boyne City shop.



After stone grinding, Shari Thompson applies hot wax to a new pair of skis. The Thompsons are members of Great Lakes Energy Cooperative.

Photos - Roger Boettcher/Leavenworth Photographics

Carving a turn on a Shaggy's dropdeck longboard.



Fast forward to 2013, and you find what started as a hobby is now a full-time business called Shaggy's Copper Country Skis.

"This year we will probably make around 200 pairs of skis," John notes proudly. "We've produced over 1,000 skis since that first mistake."

The Shaggy's company is staffed by Jeff, John and wife Shari, who does the bookkeeping, ordering materials and sales. Brother Jonathon has moved to Colorado in another line of business. John and Shari have been married for nearly 35 years.

"One of the reasons we chose to move up here, in addition to having wonderful testing facilities in nearby Boyne Mountain and Nubs Nob, is that the heart of our ski – ash and beech wood – is milled just down the road at Metalski Lumber," John explains.

Each ski takes eight to 10 hours to construct and fine-tune before it's ready to sell. The company offers 10 different pairs of skis, ranging from \$595 to around \$795.

Jeff, 23, recently graduated from Michigan Tech with a mechanical engineering degree and is applying that knowledge of how a ski performs physically and geometrically to making a top ski for Midwestern and Michigan users. "Our all-mountain ski has a tighter turning radius that works well on our conditions, but it's a great ski for the mountains, too," he says. "The Tubby, one of our best-selling skis, floats well in powder and softer spring snow conditions but provides a good ride on hardpack, as well."

The Shaggy's Copper Country Skis name was Jeff's idea. Their great uncle, Shaggy Lehto, was a blacksmith who lived in the Keweenaw Peninsula and had a hobby building hand-carved skis. "He made a pair for dad's mom that's a family heirloom, and I thought, 'what a great name for the company,'" Jeff recalls. "It's uniquely Michigan."



Besides skis, Shaggy's has started making longboards (skateboards). Here, Jeff Thompson mills out the shape of a longboard deck.

Energy-saving Resolutions for 2014

A new year is an opportunity to assess different aspects of your life and determine how you can make positive changes. Unfortunately, resolutions can be tough to keep. So, why not try a new one this year that's easy and painless? Saving energy is simple and rewarding—and, any amount you save counts. Here are four simple tips from Thumb Electric Cooperative's Energy Optimization program to help you save energy—now and throughout the year.

1. Set, program, relax: Use a programmable thermostat.

A programmable thermostat automatically controls your home's indoor temperature based on your schedule. In the winter, it is not necessary to keep an optimal heating temperature on weekdays when you're away or at work. Just input the time you typically leave and return, set the temperatures accordingly, and your home will be nice and cozy by the time you arrive, saving you energy and money.

Results: Save up to 10 percent on your heating and cooling costs per year.

Energy Optimization rebate: \$20—any model.

2. Open up and let the light in.

Window treatments are an unexpected energy saver. In these colder months, keep your blinds open during the day. This allows sunlight to enter your home and warm things up. After the sun sets, close your drapes to keep out the cold and hold onto some of the warmth generated during the day.

Results: Energy savings will gradually add up over time. Most importantly, your home will feel more comfortable.

3. Same features, less energy: Switch to energy-efficient products.

Shop the ENERGY STAR® label for guaranteed product performance and quality. ENERGY STAR products—from refrigerators to TVs and lightbulbs—are backed with third-party testing, have the same features as standard models, and use significantly less energy.

Results: Expected energy savings range from 15 to 75 percent per year.

Energy Optimization rebates: \$10-\$50—choose from over 20 high-performing energy-saving products. Find details at michigan-energy.org.

4. Dive in: Easy water-saving options.

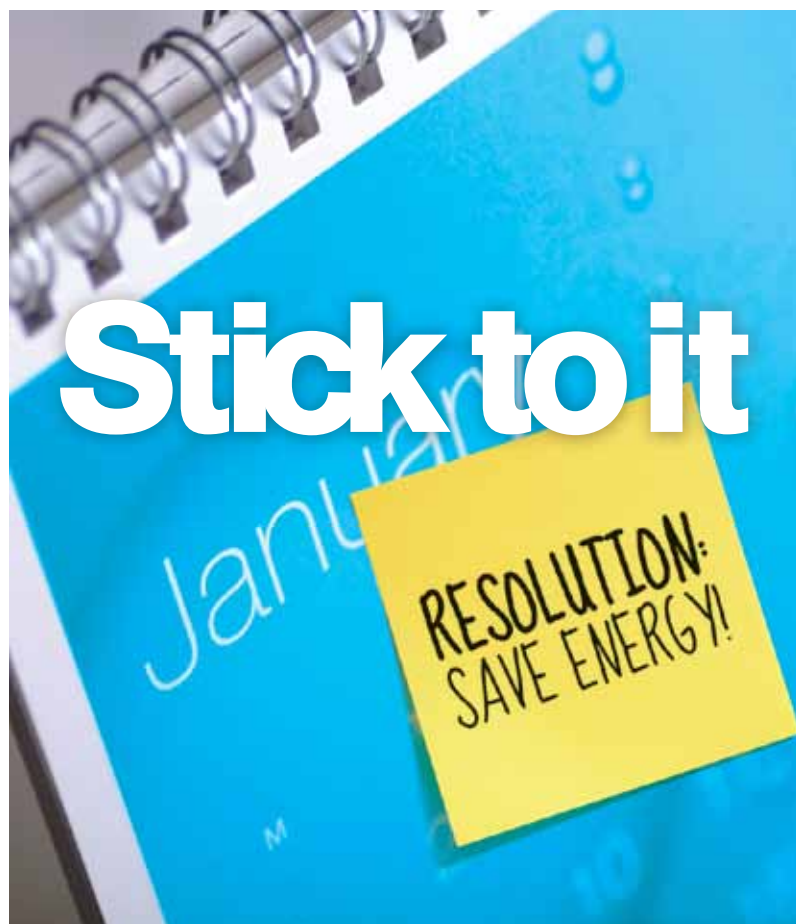
Whenever you use water, you also use energy to pump and heat the water. Making energy-saving adjustments can be simple: 1) Turn your water heater down to 120 degrees Fahrenheit. 2) Install water-saving retrofit devices, such as faucet aerators and low-flow showerheads. For recommended models that don't sacrifice water pressure, visit michigan-energy.org.

Results: Save energy, and thousands of gallons of water.

Energy Optimization rebates: \$10 per low-flow aerator kit. Kits include X, Y, and Z.

Got the energy-saving bug?

View more energy-saving opportunities and current rebate offers at michigan-energy.org or call 877-296-4319 for details.



Resolve to save energy in 2014

Want a New Year's resolution that's fast and easy? Save more energy at home and at work. Why?

It's painless, doesn't involve exercise, and still makes you feel good! With the help of the Energy Optimization program, it's easy to kick-start savings with rebates for energy-efficient lighting, appliances, furnaces, thermostats, and more.

ENERGY TIP: Take advantage of the sun's heat. Even in the winter, opening your drapes during the day can allow enough radiant heat into your home to allow you to lower your thermostat settings.

ONLINE: michigan-energy.org PHONE: 877.296.4319



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

Home Safety Calendar



Use this handy calendar to help keep your home safe all year long. Visit <http://virtualhome.esfi.org> to learn more about home electrical safety.

JANUARY

- ☐ Test GFCIs & AFCIs
- ☐ Test smoke & CO alarms
- ☐ Inspect electrical/appliance cords for damage
- ☐ Check and replace furnace filters

FEBRUARY

- ☐ Test GFCIs & AFCIs
- ☐ Test smoke & CO alarms
- ☐ Inspect electrical/appliance cords for damage
- ☐ Vacuum refrigerator coils

MARCH

- ☐ Test GFCIs & AFCIs
- ☐ Test smoke & CO alarms
- ☐ Inspect electrical/appliance cords for damage
- ☐ Replace smoke/CO alarm batteries if not done in the past 12 months

APRIL

- ☐ Test GFCIs & AFCIs
- ☐ Test smoke & CO alarms
- ☐ Inspect electrical/appliance cords for damage
- ☐ Check and replace furnace filters

MAY

- ☐ Test GFCIs & AFCIs
- ☐ Test smoke & CO alarms
- ☐ Inspect electrical/appliance cords for damage
- ☐ Vacuum refrigerator coils
- ☐ Clean air conditioners or schedule annual inspection

JUNE

- ☐ Test GFCIs & AFCIs
- ☐ Test smoke & CO alarms
- ☐ Inspect electrical/appliance cords for damage
- ☐ Dust light fixtures and lamps
- ☐ Schedule annual inspection of gas-powered dryer

JULY

- ☐ Test GFCIs & AFCIs
- ☐ Test smoke & CO alarms
- ☐ Inspect electrical/appliance cords for damage
- ☐ Check and replace air conditioning filters

AUGUST

- ☐ Test GFCIs & AFCIs
- ☐ Test smoke & CO alarms
- ☐ Inspect electrical/appliance cords for damage
- ☐ Vacuum refrigerator coils

SEPTEMBER

- ☐ Test GFCIs & AFCIs
- ☐ Test smoke & CO alarms
- ☐ Inspect electrical/appliance cords for damage
- ☐ Schedule annual furnace cleaning and inspection

OCTOBER

- ☐ Test GFCIs & AFCIs
- ☐ Test smoke & CO alarms
- ☐ Inspect electrical/appliance cords for damage
- ☐ Check and replace furnace filters

NOVEMBER

- ☐ Test GFCIs & AFCIs
- ☐ Test smoke & CO alarms
- ☐ Inspect electrical/appliance cords for damage
- ☐ Vacuum refrigerator coils

DECEMBER

- ☐ Test GFCIs & AFCIs
- ☐ Test smoke & CO alarms
- ☐ Inspect electrical/appliance cords for damage
- ☐ Dust light fixtures and lamps

Embrace Change

Last summer, a dog walked into the Bay Pines Veterinary Clinic, near Harbor Springs. He must have been amazed when the staff knew him by name. "Are you Bandit?" they asked. "THE Bandit?" His Australian Shepherd tailless butt wagged with delight as he hobbled to meet their outstretched hands.

How did they know Bandit? It turns out that everyone in the clinic reads *Michigan Country Lines* and remembered him from a column I wrote over two years ago. That's the kind of community this magazine was meant to build when it began 33 years ago.

Then, every town of decent size had a printer who crafted posters, flyers, school programs, and the weekly newspaper (a local Facebook, Twitter and Craigslist rolled



Sadly, Bandit has been diagnosed with bone cancer, so this will be his last winter.

business because they couldn't adapt to the changes computers have brought to printing and publishing.

But, *Country Lines* is adapting and changing in ways that will pave the way for greater integration between print, online and social

into one). I wrote for those printers, before I became *Country Lines*' first editor.

Many of those printers, including the one in which *Country Lines* was born, no longer exist. They went out of

media communications. These changes embrace all the ways we communicate today, and will help *Country Lines* build a stronger co-op community.

I'm proud to have been part of this magazine, and I loved working on it. It was never a job. We won a few awards along the way, and it became one of the best-read of similar publications across the country. Thank you for reading it and letting me know what you thought.

Even though this is my last *Country Lines* column, I intend to keep writing, but where I will publish is uncertain. Send me an email at mike.f.buda@gmail.com or "friend" me on Facebook if you want to know where to find my ramblings



Mike Buda is the creator and editor emeritus of *Michigan Country Lines*.



Michigan Heritage Quilt Finds a Permanent Home

Created from 36 winning squares in a *Country Lines* quilt contest held in 2002, the Michigan Heritage Quilt depicts personal memories, traditions and images from across our beautiful state, and the Eastern Upper Peninsula History Consortium has become its permanent home.

The Consortium represents 22 E.U.P. museums, and while the Pickford Area Historical Museum will be the quilt's official caretaker, it will rotate for display among all member museums.

Many thanks to readers who sent in their ideas on where the quilt should live. For more information on the quilt or the E.U.P. Consortium, contact the Pickford Area Historical Society, 175 E. Main St., P.O. Box 572, Pickford, MI 49774, or call 906-647-1372.

Pictured above with the quilt are (L-R) Mary June, Consortium treasurer; Dianne Schmitgal, Pickford Area Historical Society president; and Susan James, vice president of the Chippewa County Historical Society.



◀ DO YOU KNOW WHERE THIS IS?

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

We do not accept Mystery Photo guesses by phone! Email mysteryphoto@countrylines.com; enter your guess at countrylines.com; or send by mail to *Country Lines* Mystery Photo, 2859 W. Jolly Rd., Okemos, 48864. Include your name, address, phone number and name of

your co-op. Only those sending complete information will be entered in the drawing. The winner will be announced in the March 2014 issue.

The Nov./Dec. 2013 contest winner is Bill Pioszak of St. Johns, who correctly identified the photo as the Cairn Monument on Cairn Hwy. north of Kewadin, marking the 45th parallel.



LETTERS

Raw Egg Recipes

I have been meaning to write and tell you that pasteurized raw eggs can be found in grocery dairy and egg sections. These are safer for recipes calling for raw eggs. Maybe you can pass that along to the lady who wrote about them in the July/Aug. 2013 issue.

I also want to comment on the diabetic recipes (Oct.). Thinking regarding diabetics and sugar has greatly changed. They are no longer limited to sugar-free substitutes for their sweetening choices. The focus is now on balancing diet with assorted proteins, fats and carbs, eating smaller portions throughout the day, and counting carbs.

As a nurse, I try to pass along information people can use. The danger of sugar substitutes is they can make diabetics think such foods are good for them or don't need to be limited or counted. Managing diabetes is a lifelong, critical process that's so much more than removing sugar from the diet.

— Laura Tomell, Tecumseh
Midwest Energy

Mystery Photo

The Nov-Dec mystery photo (at left) was built as a WPA project. It has a representative stone from each of Michigan's counties.

My sister-in-law's father (a stone mason in Traverse City) helped build it, so I make sure whenever any of his great-grandchildren are here that they stop to see it.

— Peg Gage, Free Soil
Great Lakes Energy

If the only thing bigger than your propane bill is your propane tank...



Switch to a WaterFurnace geothermal comfort system.

Are you tired of the large, expensive eyesore in your backyard? A WaterFurnace geothermal heat pump **doesn't have any outdoor equipment**. It uses the **clean, renewable energy** in your backyard to **save up to 70% on heating, cooling and hot water**. A WaterFurnace unit is **twice as efficient at cooling** than the best air conditioner or heat pump and **five times more efficient at heating** than any ordinary furnace. If you're ready to learn more about geothermal and the **30% tax credit**, visit your local WaterFurnace dealer today.



visit us at waterfurnace.com

Bad Axe
B & D Htg
(989) 269-5280

Berrien Springs
WaterFurnace
Michiana
(269) 473-5667

Big Rapids
Stratz Htg & Clg
(231) 796-3717

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

Carsonville
Certified Temperature
Innovations
(810) 300-7748

Clifford
Orton Refrig & Htg
(989) 761-7691

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

Grand Rapids
Total Comfort
Resource, LLC
(616) 406-3182

Hart/Ludington
Adams Htg & Clg
(231) 873-2665

Indian River
M & M Plmb & Htg
(231) 238-7201

Ionia
Home Experts
(800) 457-4554

Jackson
Comfort 1 Htg/
Lenawee Htg
(517) 764-1500

Kalkaska
Kalkaska Plmb & Htg
(231) 258-3588

Lapeer
Porter & Heckman
(800) 445-4328

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

Muskegon
Adams Htg & Clg
(231) 873-2665

Muskegon
Kiessel Geothermal
Htg & Clg
(231) 747-7509

Onaway
Standard Htg
(989) 733-8309

Palms
Lakeshore
Improvements
(989) 864-3833

Portland
ESI Htg & Clg
(517) 647-6906

Traverse City
Geofurnace Htg
& Clg
(231) 943-1000

Traverse City
D&W Mechanical
(231) 941-1215

UPPER PENINSULA

Manistique
Hoholik Enterprises
(906) 341-5065

Marquette
J Goods Plmb
& Htg
(906) 235-5788

Marquette
Swick Plmb & Htg
(906) 228-3400

**Sault Ste Marie/
Kinross**
Great Lakes
Services Inc.
(906) 632-5543

 facebook.com/waterfurnacefans

 twitter.com/waterfurnace

 youtube.com/waterfurnace

WaterFurnace is a registered trademark of WaterFurnace International, Inc.



Thumb Electric
Cooperative
www.tecmi.coop

ELEVATE YOUR FUTURE

YOUTH LEADERSHIP SUMMIT

>> PRESENTED BY MICHIGAN'S ELECTRIC COOPERATIVES

April 23-25, 2014 | SpringHill Camps | Evart, MI



YOU ARE A LEADER. In the classroom, on the team, and in your community, you guide and inspire others to contribute their best efforts. Join other young leaders like you from throughout Michigan at the **YOUTH LEADERSHIP SUMMIT (YLS)**, presented by Michigan's electric cooperatives. This **FREE**, high-energy experience will help you develop your leadership habits, explore career opportunities in the electric industry, and learn how to be actively involved in the democratic process. You are a leader.



>> PARTICIPANTS WILL BE CONSIDERED FOR AN ALL-EXPENSES-PAID WASHINGTON, D.C. YOUTH TOUR. VISIT miYLS.com TO LEARN MORE.

miYLS.com



>> SCAN THE QR CODE WITH YOUR SMARTPHONE TO LEARN MORE, OR TO APPLY ONLINE

YOU ARE THE FUTURE.