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March/April 2012

Michigan COUNTRY LINES

Valerie Donn's Garden Art

SPECIAL **GARDENING** EDITION

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*Not in all editions


Michigan's Electric Cooperatives
countrylines.com

On the Cover*
Valerie Donn, of Williamsburg, MI, is an artist gifted with the vision to paint and create on a variety of canvases—especially those related to gardening.

Photo – Sarah Brown/Traverse City
sarahbrown-photography.com/

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Association officers are **Brian Burns**, PIE&G, chairman; **Ken Swope**, Midwest Energy, 1st vice chairman; **Tony Anderson,** Cherryland, 2nd vice chairman; **Eric Baker**, Wolverine Power, secretary-treasurer; and **Steve Boeckman**, Great Lakes Energy, 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.

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

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2012 International Year of Cooperatives

In our last issue we asked you to share any stories, photos or artifacts related to PIE&G's history in recognition of the co-op's 75th anniversary. I want to thank Orville Wheelock of Levering for sharing his story (see p. 9). It is interesting the number of Mr. Wheelock's family who found employment when the electric system was being established in the area—his father, uncles and cousins—local labor, building local infrastructure, for local benefit.

Brian J. Burns
President & CEO

It may be worth reminding those not familiar with the story of why electric cooperatives came to be. When investor-owned or "for-profit" utilities determined there was limited, if any, business rationale (read "profit") in extending electric lines into rural areas, then local leaders took it upon themselves to do what free markets were reluctant to do and they did so by choosing a different business model—a "cooperative" business model.

Seventy-five years later, and with utility plant investments in excess of $120 million, PIE&G delivers energy—both electricity and natural gas—to over 40,000 member-owner points of service in nine northern Michigan counties.

Coincidentally, 2012 is not only PIE&G's 75th anniversary, it is also being recognized by both the United Nations and U.S. Senate as the International Year of Cooperatives (IYC) because of the vital role cooperatives play in the economic and social well-being of the United States and the world. IYC is intended to raise public awareness of the invaluable contributions of cooperatives to poverty reduction, employment generation and social integration, and to highlight the strengths of the cooperative business model as an alternative means of doing business and furthering socioeconomic development.

It is very fitting that both PIE&G's 75th anniversary and the International Year of Cooperatives (see related story, p. 7) are being celebrated at the same time. Your co-op fits the bill as having made invaluable contributions to poverty reduction, employment generation and social integration by way of an alternative business model!

Revealing R-values

Different types of insulation, ranked by R-value, exist to keep your home comfortable and electric bills affordable.

"R-value reflects the ability of insulation and other parts of your home, like windows, to resist the transfer of heat," says Art Thayer, energy efficiency programs director for the Michigan Electric Cooperative Association. "The rating depends on material, thickness and density, and a higher R-value means more effective insulation, of which multiple layers may be combined for a higher R-value."

How Insulation Works

Metals and liquids easily transfer heat, making them bad insulators. Air, however, does not conduct heat, making it a strong insulator when isolated in small pockets.

Just as fur keeps animals warm, insulation holds heat in (or out) of a building. Fur is a collection of hair—tiny hollow cylinders. Air fills the cylinders and spaces in-between. The smaller the air space in between cylinders and the more spaces there are (longer hair equals more space), the greater the insulation. Building insulation works similarly—fiberglass insulation, for example, is a collection of hollow fiberglass cylinders.

Be careful to preserve the air—the bulk of your home's protection—when installing insulation. When an installer squeezes 3 inches of insulation into a 1-inch space, critical air pockets are eliminated. For this reason, actual insulating R-values may not always match the label. Insulation must be installed correctly to maximize protection and electric bill savings.

The Value of R-Values

The first layer of insulation pays for itself fastest, saving more than one-half of the energy dollars spent on heating or air conditioning. However, as more insulation is added, efficiency gains dwindle.

Boosting the R-value of a wall from 0 to R-10 cuts 90 percent of heat loss from one side of the wall to the other. This makes an immediate difference you can feel. Adding another layer of R-15 insulation (total R-value of 25) only cuts another 6 percent of heat transmission. Further increasing insulation thickness from R-25 to R-35 helps only by a little more than 1 percent.

In some regions with several months of very cold winds, however, increasing attic insulation values from R-25 to R-35 or even R-50 can be worth the investment over your home's life. But in most seasonal climates, replacing single-pane windows saves more energy than adding insulation to the attic, floors or walls (if R-25 to R-30 is common throughout the home).

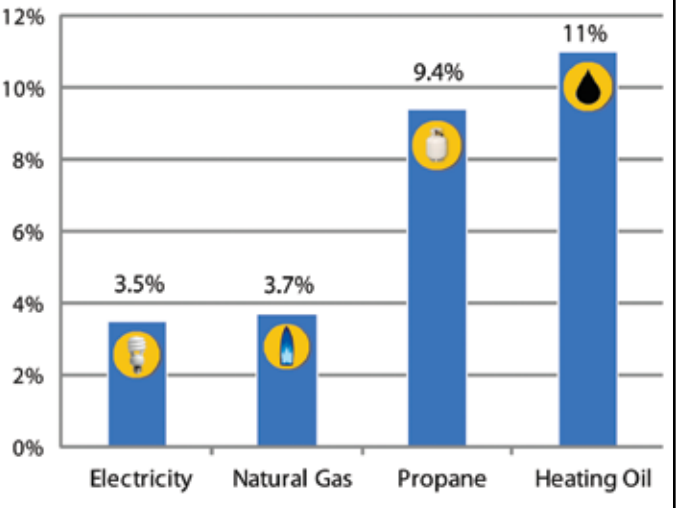
A typical single-pane window has a 0.9 R-value, but a triple-glazed pane assembly with low-emissivity (low-E) insulated coatings rates 8.3. Based on an electricity cost of 10 cents per kilowatt-hour, a home with 18 single-pane windows (4 square feet each) could waste $94.32 over three months (assuming 12 hours daily of a 40 degrees F indoor/outdoor temperature differential). A more efficient window would cost $10.20 over the same time. After a year, savings from switching out the windows could surpass $300.

Take advantage of an online energy audit at michigan-energy.org or find more insulation tips at energysavers.gov.

– Kris Wendtland

Electricity prices remain stable

Compared to other types of home heating fuel, electricity prices have remained the most stable over the past 10 years. This graph shows the average annual price increase from 2000 to 2010 for each fuel type.



Source: U.S. Energy Information Administration (EIA) September 2011 data

Residential Rate Comparison for MPSC-Regulated Electric Utilities

As of February 1, 2012

MPSC-REGULATED ELECTRIC UTILITIES*	1,000 kWh Monthly Bill
Consumers Energy/CMS	$126.41
Midwest Energy Cooperative	$127.90
Alpena Power	$129.32
Cloverland Electric Cooperative	$129.86
PIE&G	**$131.82**
Great Lakes Energy (Cooperative)	$132.62
Thumb Electric Cooperative	$132.91
Detroit Edison/DTE	$154.01
Ontonagon County REA (Cooperative)	$199.44

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

Your Board In Action

At their December 2011 and January 2012 regular meetings, the PIE&G Board of Directors:

- Welcomed guests and co-op members Vermilya and Pascador.
- Approved board minutes, new members, and 2011 4th quarter write-offs for bad debt owed the co-op in the amount of $19,989.52.
- Welcomed Michigan Electric Cooperative Association president and CEO Craig Borr, who addressed the board regarding how the statewide organization is working on behalf of electric cooperative members on state and federal legislative and regulatory issues.
- Reviewed financial and debt portfolio management board policies.
- Authorized additional debt financing of up to $4 million in 2012.
- Accepted the team reports of CEO Burns and CFO Sobeck.
- Allocated $2,500 in 2012 and 2013 to Alpena Community College for instructional equipment associated with the Electrical Power Technology Center.

Letters

Praise for Barb Barton's natural living, Mystery Photo follow-ups, classified ads, and your thoughts on apples. It's all here in your reader letters.

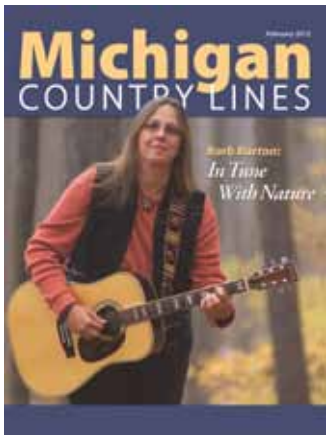
In Tune With Nature

Barb Barton (*February*) is absolutely the most talented person I have ever known. Not only is she a musician, singer and song writer, she is a biologist to boot! She is a defender of nature, the earth, and human rights. If you have a chance to go to her "gathering," GO! You will learn so much about the earth, food, nature, music and compassion—the list is endless. Thank you so much for publishing this article.

– Diann King, Three Rivers

I have the privilege of knowing and have worked with Barb Barton. I didn't realize how much she taught me about nature and the woods until I was in the woods without her, telling someone else about what was there. Barb is truly a woman of the earth with great knowledge, and a big heart to boot! Her music? You'll be addicted!

– Nahnie, Haslett



Barb is an amazing woman and an inspiration to people to live closer to Mother Earth whether they live in Michigan or another part of the country! Please give more articles like this.

– Eddie, Gainsville

Woolsey Photo Is No Real Mystery

I know the January *Michigan Country Lines* Mystery Photo VERY WELL!!! It is Clinton F. Woolsey Memorial Airport, and at one time the building was a creamery for cows.

My mother painted a picture of this building for my son, and he has it hanging in his bedroom. My sister and her husband own a cottage near this airport.

FYI: Charles Lindbergh and Amelia Earhart both flew here!

– Maureen Buchel, Howell

My husband proposed to me there [Woolsey Airport]. As of Feb. 24, we've been married 23 years.

– Elizabeth Chapelle, Honor

Woolsey Memorial Field is one of the most unique airport buildings in the country—it's a classic grass field that has the flavor of a World War II airfield in England. It's a great place to fly into in the summer and use one of the bicycles that are stored there for private pilots and passengers to ride into town. A real throwback to the good ol' days!

– Mark Wilke, Ellsworth

The airport, with its grass runway, is the scene every summer for a 'Fly-in Pancake Breakfast' (this year, July 28). The fly-in also hosts a car show and the two events draw a nice crowd.

– Roger & Sandra Parkins, Suttons Bay

The Northport Pilots Association and other groups sponsor a fantastic 'Dawn Patrol' around the end of September each year, and all are welcome.

– Robert Evans, Traverse City

The north end of the grass runway leads to a beautiful little park on Lake Michigan with a lookout tower. It's a wonderful place to get away and relax!

– Steve & Michele Rambo, Howard City

If you enjoy Michigan history as I do, you might like knowing how the subject of the January Mystery Photo came to be. Visit http://bit.ly/b6Jv5L

– Charlie Johnston

My 86-year-old father was born and raised in Northport, and the Woolseys are distant relatives. My family has enjoyed many hours at this location over the years!

– Catherine Hall McNalley, Hemlock

The cutest airport in the world!

– Elizabeth Black, Traverse City

All About Apples

Enjoyed your column about Michigan apples, and wanted to comment on Honeycrisps. Here in Oceana County, we have quite a good supply, as well as the 'daughter' of Honeycrisp, Sweet Tango. If you haven't tried a Sweet Tango yet, get your taste-buds ready! Each September, at the Apple & BBQ Cook-Off Festival in Mears/Silver Lake, Honeycrisp and Sweet Tango run neck-and-neck for 'fan favorite'!

– Gay Lynne Liebertz, Pentwater

In 1954 or 55, my family bought a small farm in Rives Junction, MI, and though my dad worked full-time as a conservation officer, he began farming part-time—perhaps as a way to introduce his children to the life he knew growing up.

We had a great yard with two large apricot trees along the driveway, two peach trees, and a pear tree that I spent hours climbing and eating its produce.

My favorites, however, were the apple trees. I ate apples from mid-summer, when they were so bitter they made your face twist up, until they began to soften,

DO YOU KNOW WHERE THIS IS?

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

Please note that we do not accept Mystery Photo guesses by phone! Email **mysteryphoto@countrylines.com**, or send by mail to *Country Lines 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 May 2012 issue.

The January contest winner is Davina Clark of Traverse City, who correctly identified the Woolsey Memorial Airport north of Northport.

or when a normal person called them 'ripe.' They were the greatest combination of sweet, tart and crisp and have probably gotten sweeter with the passage of decades and the fact I've never seen them for sale at a grocery or fruit stand.

Fast foward 50 years to when my wife and I bought our current property. While leafing through a tree catalog to find fruit trees suitable for our growing zone, I saw an 'heirloom' variety that rekindled memories of those apple trees from my youth. You guessed it—it was a Transparent.

After reading Buda's article, it is apparent I'm not the only long-suffering [Transparent apple] addict. Last year, my tree had it's first and only apple, and true to my past I picked it too early, so can't say if they are as good as I remember. Time will tell, as I hope to have more than one this year. I'd invite you over, but I'm not sure I can bring myself to share yet.

– Charlie McCord

My dad and all seven of his brothers and sisters were fruit farmers in SW Michigan. As a result, apples have always been a part of my life, too.

Shortly after I got married, I planted two apple trees: a Macintosh and a Jonathan. I've taken good care of them ever since [annual pruning, fertilization, periodic spraying] and get a nice crop every year.

My wife makes five or six pies shortly after I pick the apples, and places them [well-wrapped and uncooked] in the freezer. Then, she can quickly bakes us a 'fresh' apple pie for most special occasions that arise. Another trick I learned is: The day I pick the apples, I sort out two 2-gallon plastic bags of the 'best,' and after squeezing out the excess air, seal the bags and place them in our basement refrigerator. Each time I hunger for an apple, I remove one or two from a bag, reseal it, and enjoy a fresh apple! When cared for this way, apples will remain relatively fresh into April of the following year!

– Bert Metzger, West Bloomfield

There are apples for sale today, throughout Michigan, that are… a far better apple than the Yellow transparent ever was.

I just finished your essay on apples. You really like the apples in your memory! When it comes to today's apples, you: • Don't like the arsenic in seeds • Don't like the wax • Don't like the pesticides • Don't like the cost of the Honeycrisp...

...and all the wonderful gains we have made storing delicious, high-quality apples are not enough, so you suggest apples this time of year 'taste so old' they are from the year before??

I heartily contest your whole perception of today's apples. Why call the article 'An Apple A Day' when you're really saying today's don't measure up to the yellow Transparents in your childhood memories?

There are apples for sale today, throughout Michigan, that are crisp and tasty, and a far better apple than Yellow transparent ever was.

– John King, King Orchards, Central Lake

Mike Buda responds: *I still eat an apple-a-day. And, I agree there are more and better varieties now than the old Transparents, but there was a short time before they fully ripened when they were spectacular, and there's no way to duplicate that taste with stored apples.*

Also, I can live with wax now that I know why it's there, and I really think Honeycrisps are worth the cost. But, you'll have to convince me that some apples I buy now aren't over six months old because they sure have an old texture. Thanks for writing.

No More Classified Ads?

I noticed there haven't been any classified ads listed at the back of the magazine. Are you not going to have them anymore?

P.S. – I really enjoy your publication! Articles are informative and things that I can relate to, and the recipes are great! I have used at least one or two of them from every issue.

– Jane Howe

Editor's Note: *With so many cheap, easy ways to sell things online today (Craigslist, eBay), we were receiving fewer classified ads every issue. We made the difficult decision to discontinue the classified ads to make room for more great articles.*

Scholarships Offered

Each year, the Michigan Electric Cooperative Association awards two $1,000 scholarships to qualifying applicants. Individuals are chosen based on their scholastic achievement and extracurricular involvement during their high school career.

The applicant's parent or guardian must be a member or employee of a Michigan electric co-op, and the applicant must be planning to attend a Michigan college or school full-time. Selection will be based on grade point average, character, leadership, academic achievement, extracurricular and community activities, and essay response.

Applications are available at countrylines.com; click on "Youth," email tschafer@meca.coop, or call 517-351-6322, ext. 201. Eligible applications must be postmarked by *April 6, 2012*.

Shop Co-op!

There are over 900 electric co-ops in America. But your local electric co-op is just one type, and there are over 29,200 different co-ops operating nationwide, including many in the ag industry. From dairy to oranges, and almonds to cotton, our farmers know the value of the co-op business model.

The next time you grocery shop, see how many items you can buy that were produced by a co-op.

Starting with produce, pick up some Ocean Spray cranberries or Sunkist oranges, tangerines, grapes or grapefruit.

Then, cruise to the refrigerated cases for eggs – 95 percent of American eggs are produced and marketed by co-ops. Then, get some Land O'Lakes butter, Cabot or Tillamook Cheese. Need a warm drink? Try Equal Exchange coffee, tea and hot chocolate. Finally, grab some Blue Diamond almonds for a perfect pick-me-up snack.

Now that you're done grocery shopping, visit Ace Hardware or True Value for weekend project supplies. Or, replace your old blue jeans with new ones from GAP, Banana Republic, or Guess—they all get their cotton from the Plains Cotton Growers Cooperative's Denimatrix. But first, visit another co-op—your credit union—to make a deposit to cover your purchases.

The co-op business model promotes self-sustainment and local economic growth. Support all our co-ops as we work together to build a better world.

Find a co-op business near you at. go.coop.

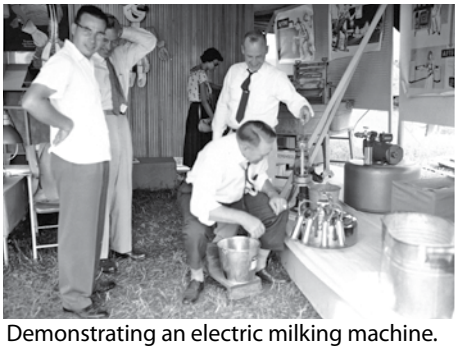
2012 International Year of Cooperatives

1937–2012

Electrification!

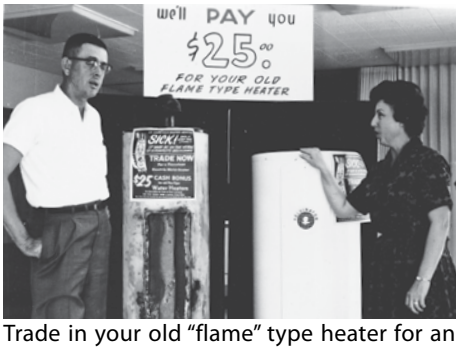
...and the History of Your Co-op

In 1932, while lights in distant cities lit the evening skies, most farm folks simply could not afford to pay for electric line extensions (around $1,000 at the time). Consequently, rural farmers were left in the dark. The extreme hardships brought on by the Great Depression devastated farm and city across America. With little money of their own and banks going broke, farmers' chances of getting electricity were slim. Life on the farm was one of back-breaking chores and drudgery. Daily work often extended into the evening with only kerosene lanterns to work by. Dairy farmers had to milk cows in near darkness all the years before REA. In 1935, before electricity, rural residents felt like second class citizens. Tasks taken for granted today were not so easily accomplished back then.



Demonstrating an electric milking machine.

Poles brought into the yard in Tower by rail were with help from early lineworkers like Mr. Wheelock.



Trade in your old "flame" type heater for an electric model and receive $25.

One such example was the farm wife's weekly chore of washing clothes. Well water contained minerals that reacted with soap, forming a hard-water scum on fabrics. To deal with this problem, early farmers collected rain water from the roof run-off into eaves troughs which flowed into pipes where the rain water was collected underground in a cistern. The cistern was about eight feet underground and shaped like a barrel and made of field stones mortared together. A pipe from the cistern ran up into a hand pump in the kitchen, but lots of lifting and heating of water on the stove was required to do laundry. A typical scenario would include a huge vat of boiling water over a roaring fire and three large zinc washtubs and a dish pan on a bench. The clothes were scrubbed on a washboard in the first tub; after vigorous scrubbing, the woman wrung out each piece, removing as much of the dirty water as possible and put the clothes in the vat of boiling water. Often, she would use a wooden paddle or broomstick to stir the clothes, moving them swiftly up and down like today's agitator in an automatic washer. Then she would transfer the clothes from the boiling water with the paddle to the second tub to rinse. She would bend over and rinse each piece individually. After another wringing out, she'd transfer the clothes to the third tub containing bluing to make the clothes whiter and brighter, before finally transferring them to the dishpan for starching. After each load the water had to be changed bucket by bucket. By the end of the day the clothes were washed, yet the farm wife was exhausted, her back aching and her hands raw and swollen.

Then laundry was hung on a clothes line, or draped over a bush to dry where there was a breeze, lots of sunshine and away from the dusty road. In winter, clothes were hung to dry inside and on front porches.

The fabrics were wrinkled when dried but they were smoothed by a hot, flat iron and the appearance of trousers and shirts were improved by suitable creases. Until electricity became common, flatirons were heated on a stove. At first, flatirons had a steel loop handle and the user had to wrap the handle with cloth to keep from burning her hand. Flatirons were nickel plated in the 20th century, but people still had to take care to prevent it from rusting and ruining the clothes. Electrically heated irons appeared during the 1920s and made ironing easier, but they were still heavy. Dried laundry needed moistening with water before being ironed, so it was sprinkled by hand, and then rolled to distribute the moisture evenly and sometimes put into a cooler or icebox overnight. People earlier did ironing on a kitchen table, but ironing boards were more convenient and at a better height.

Under President Franklin D. Roosevelt, experts determined that rural electrification was economically desirable and feasible. Roosevelt moved swiftly to bring relief from the Depression and to put people back to work. The signing of the Tennessee Valley Authority Act in May 1933 signaled the start for economic development and thousands of new jobs as well as a new and vast source of electric power. The act provided that "preference" be given to "states, counties, municipalities and cooperative organizations of citizens or farmers, not organized for profit but primarily for the purpose of supplying electricity to is citizens or members." On May 11, 1935, Roosevelt signed the order establishing the Rural Electrification Administration. REA's primary goal was to bring power to the farms in rural America. The consensus was that

On Sept. 22, 1937, Presque Isle Electric Cooperative set its first pole in Posen, MI. The line was the first REA-financed line energized in the state on Dec. 23, 1937.

the farmers should have power for lighting their homes and improve productivity on the farm with less labor and to cut costs. Once the electricity made it to the rural farms, life began to change.

REA offered a special program for wiring and equipment loans through cooperatives. Dairy farmers found electricity an immediate money maker. One Michigan farmer related to REA how he had been paying $45 a month for ice to cool the milk and then invested $350 in an electric milk cooler. He happily reported that the cooler not only did a better job, but only cost $10 a month for electricity and would pay for itself within a year. Country schools reported improved student grades once they had better lighting.

By 1943, PIEC was serving electricity to 2,900 farms and rural residences. Energy consumption was totaling about 300,000 kilowatt hours per month—an average of just over 100 kilowatt hours per member. Farmers were using electricity for pumping water, grinding feed, milking and lighting barns and poultry houses, even chick brooding. Families rushed to get electric irons, washing machines and radios, and most importantly, electric lights. The impact of rural electric was causing a chain reaction as people wired their homes and farm buildings and purchased appliances and equipment worth tens of millions of dollars. In Michigan, the total investments and purchases were estimated to approach $1 million in the first three years. That's in addition to the economic boost of hundreds of new jobs created by electric cooperatives.

Excerpted from "On Their Own Power – The Story of Michigan's Electric Co-ops," Raymond G. Kuhl, 1988; and "Farming West of Atlanta, Michigan 1910-1960 – The Way We Used To Do It," Herman Lunden Miller, April 2008.

Orville Wheelock Recalls…

When we asked members to share their memories of when the lights came on, Orville Wheelock of Cheboygan wrote that he and his family helped build some of the lines. Here is his story.

My name is Orville Wheelock and I'm 90 years old. I remember a lot about the years when the REA brought power to the rural areas of Cheboygan County. There were quite a few Wheelocks who worked on the lines. My uncle Claude was hired to go around and get permission to put the lines through private property. My dad, Ernest, my Uncle Keith and cousin Kenneth helped clear the land where the Tower Dam was built.

In the summer of 1938, between my junior and senior year of high school, I worked installing lines in Hebron and Monroe townships with two of my cousins. In those days, all the holes were dug by hand. The poles were raised by hand with gin poles and held in place while the dirt was packed around it. When we were building lines in Hebron there was a lot of swampy land we had to go through. In order to get poles in, we had to raise them with gin poles and hold them in place while a stick of dynamite placed under the pole was blown to remove the mud so the pole could drop into the hole. We then had to build "shoes" under a lot of the poles to hold them in place. Charles Johnson was in charge of our team-building then, and some poles are still in place and use today.

I still remember one day when we were working on Riggsville Road, the boss told me to take an axe and saw to cut down a tree, and then burn the brush. The tree was in the side yard of the property. Just as I was getting ready to cut the tree, the owner came out and wanted to know what I was doing. When I told him, he said if I cut the tree he would shoot me. I told my boss and he talked to the farmer for a while and came back and said to cut the tree. I took care of the cutting and burning, all the while with an eye on the back door. There were a few men who had to quit working because the poles were covered with creosote and they broke out in boils from it.

I remember when the power came on. My mother had every light in the house on. Karl Heilman wired a lot of the homes and barns in our area. It sure seemed good that we didn't have to take a lantern to the barn to milk the cows anymore.

Higher Power Costs On Horizon

Growing demand and environmental regulations stress electric rates.

Thirty-five years ago disco was king, personal computers were born, and Americans needed more electricity. To meet this demand, nonprofit, consumer-owned electric co-ops—in partnership with their wholesale power suppliers—built or invested in power plants, mostly coal or nuclear.

Unfortunately, many of these plants may now be forced to make expensive changes to meet increasing environmental regulations—and as electric demand keeps climbing, new generation will be needed to keep the lights on. Some coal-fired power plants may require modifications so severe that it will be more cost-effective to simply shut them down.

Accelerating Factors

Consumers, adding more plugged-in devices daily, already pay more for electricity. The average annual residential electric bill has risen $263.40 since 2005, with electricity use outpacing efficiency efforts. Despite the recession, U.S. homes on average used an additional 50 kilowatt hours (kWh) every month between 2009 and 2010; retail electricity sales rose 4.4 percent.

Americans aren't the only people using more power; as worldwide energy use grows, resource competition (and prices) shoot up. By 2035, global energy consumption, primarily in China and India, will jump 53 percent from 2008 levels.

In spite of increasing energy needs, 37,600 megawatts (MW) of older coal-fired power plants are slated for retirement by 2018. The North American Electric Reliability Corporation (NERC), the Georgia-based organization charged with overseeing reliability of the electric grid covering the United States, most of Canada, and the Mexican state of Baja California Norte, predicts a worst case scenario of environmental regulations may force coal plants generating up to 54,000 MW of additional power to shut their doors by 2018.

New power plants could offset this loss, with natural gas taking center stage. The National Energy Technology Laboratory, a branch of the U.S. Department of Energy, focused on advancing national, economic and energy security, predicts 20,000 MW of natural gas facilities will start operating this year, with another 28,000 MW proposed for 2013. A strong breeze from wind project proposals may add 42,000 MW this year and 28,000 MW in 2013—but only if federal production tax credits continue.

Shifting Fuel Focus

While about one-half of the nation's electricity comes from burning coal, co-ops rely more heavily on the fossil fuel—about 80 percent. That's because the majority of co-op coal power plants were built between 1975 and 1986, when using natural gas was prohibited by the federal Powerplant and Industrial Fuel Use Act.

Now, a series of U.S. Environmental Protection Agency (EPA) regulations impacting cooling water intake structures, coal ash disposal, interstate transport of air pollutants, and hazardous air pollutants like mercury are affecting all electric utilities. In most cases, co-ops will need to retrofit coal-fired plants with costly pollution control equipment; in others, co-ops could opt for early plant retirements.

"Time is tight—improvements take time and new technologies have to be tested before going mainstream," says Kirk Johnson, senior vice president of government relations for the National Rural Electric Cooperative Association (NRECA). "We're deeply concerned that EPA's strategy to require significant change within very compressed timelines may be unachievable and could damage the economy of rural America and affect service reliability."

Seeing the handwriting on the wall, co-ops have taken action. Over the last decade, power supply co-ops have invested $3.4 billion to boost plant performance and limit emissions. In fact, since 1990, power plant emissions of nitrogen oxides and sulfur dioxides—compounds formed by burning fossil fuels—dropped at least 67 percent nationally even as electricity use climbed 38 percent. And, the large-scale expenditure isn't over. Another $4 billion is slated for upgrades through 2021, with the bulk of the money—$2.18 billion—marked for work this year and next.

Regulation Risks

"Environmental regulations are shown to be the number one risk to [maintaining electric] reliability over the next one to five years," reports NERC's 2011 Long-Term Reliability Assessment.

Over the last decade, co-ops have invested $3.4 billion to boost power plant performance and limit emissions. Another $4 billion is slated for upgrades through 2021.

Why the concern? Because steps required by EPA rules have the potential to cost the industry billions of dollars and don't provide enough time to comply.

"Regulation on top of regulation, and court decision on top of court decision, have compounded the situation to the point that we now have contradictory regulations and court decisions that don't make any sense," explains NRECA CEO Glenn English. "Our nation needs to adopt a balanced, common-sense approach to environmental protection that factors in electric reliability and affordability."

NRECA has been actively urging the EPA through comments, testimony and litigation to consider the negative impacts of increased electric power costs on consumers as it continues to move forward with its rulemakings.

Electric co-ops are leading the way to find affordable solutions to America's electricity demand. Find out how you can help at ourenergy.coop. *– Megan McKoy-Noe*

Sources: U.S. Energy Information Administration 2011 International Energy Outlook Table 5A; NERC 2011 Long-Term Reliability Assessment; NETL Tracking New Power Plants, July 2011

7 Questions

for Michigan Department of Agriculture and Rural Development Director Keith Creagh.

People might assume you grew up on a family farm. What has kept a city-kid like you in the agriculture industry for over 35 years?

I enjoy working with people who make their living from the land. They're salt-of-the-earth people who work hard and aren't afraid to tell you just exactly what they think.

What does your quote 'agriculture is more than just cows and plows' mean?

MDARD is involved with all kinds of things people don't traditionally associate with agriculture. We oversee everything from ag business development to certifying the scales for pharmaceuticals, gas pumps and trucks, regulating county fairs, and international exports.

Last year, Gov. Snyder signed an executive order officially adding "rural development" to the Dept. of Agriculture's mission. Will this focus lead to more jobs for rural Michigan?

Our role isn't to create jobs, but to create an environment where businesses can flourish and create jobs on their own. We help them create this environment by bringing groups and resources, such as bankers, realtors and others together with the Ag Department and other sectors. It's a fun, collaborative environment to be working in!

Gov. Snyder has also said that rural economic development is a key focus for his administration—particularly in agriculture, mining and exports. What is your role in this?

The governor is serious about reinventing Michigan, and we're having some good conversations about projects that will boost rural communities, businesses and the economy. Land-based industries need to be part of the state's rejuvenation. Sustaining the state's food processing plants and other businesses is crucial.

All state departments need each other—whether it's health, housing, tourism or agriculture—to help determine what's needed to reinvent Michigan and how rural communities can be involved. This means renewed cooperation among state departments to solve business problems.

Tell us some success stories about how the MDARD is benefiting rural businesses and communities.

We're partnering with the governor and the Michigan Economic Development Corporation on a plan that provides Asian food companies with healthy foods while promoting Michigan food exports—especially fruit. In fact, we run an export program that partners with foreign ag services around the world, and locally.

We also assist Michigan companies with other high-end marketing and exports, such as working with the Johnson & Johnson company, of Zeeland, to provide a new baby formula for infants in China.

Other projects involve everything from "Project Fresh"—helping farm markets develop electronic readers they can use to accept Michigan Bridge Cards (debit cards issued to Department of Human Services clients to buy certain food products)—to providing food safety and science engineers to help establish a dairy plant in Coopersville.

We have helped Cherry Central Cooperative (Traverse City fruit grower/processor) develop new markets in France; Mastronardi Produce (Livonia gourmet vegetable grower) with bulk fertilizer storage and increasing their productivity.

We also work with food processors on logistics at the farm gate, including farm and pesticide safety, registering products, sorting out federal rules, and defining technology and expertise that gets projects moving.

What efforts are you most excited about?

There's just something happening in Michigan—we're iconic food processors with a water resource and value chain that is envied worldwide. But now our business expertise is also drawing the attention of foreign companies.

We've helped 22 companies with first-time food sales overseas. Exports in 2010 were $1.75 billion in food and ag products, with top markets being Canada, China, Japan, Mexico, South Korea and Taiwan. These exports boost farm prices and income while supporting 14,700 jobs.

There's renewed interest in developing the U.P. mining and forestry industries. We're working on the best tax structure, rewards for local people, and supporting needs, like access to workers with advanced degrees—all things that make a community prosperous. Of course, energy is front and center in those conversations.

There's also more optimism—a new and exciting little pulse beating in Michigan that is relationship driven, and we are working with rural communities to increase their success.

***Michigan Country Lines* magazine has been featuring Michigan-made (or grown!) products. What is your favorite?**

The things I love most about Michigan aren't physical things. I remember driving over the Mackinac Bridge with my son one fall day at sunset and asking him, 'is there anyplace else you'd rather be?' But as far as actual Michigan-made products, I would say fresh fish from Krueger's Fish Market in Mackinaw City is at the top of my list. Couple it with asparagus, a Michigan wine and Hudsonville Ice Cream, and you have a pretty nice meal. And, the Stormy Kromer hat gets an honorable mention!

THE CREAGH FILE:

- Raised in Detroit, earned a B.S. in forestry from Michigan Tech. Univ.
- Retired after 33 years at the Michigan Dept. of Agriculture, serving as chief deputy director, and pesticide/plant pest division director.
- Worked as industry affairs director for Neogen Corp., 2007-2011.
- Appointed by Gov. Snyder to return to MDARD as director in 2011.

Valerie Donn's Garden Art

Photo – Sarah Brown Photography

If you could stand among Valerie Donn's tulips this spring, you'd see a handmade birdbath whose design was inspired by the leafy reach of her rhubarb plant. And nearby, hidden under the sweet scent of catmint and its leaves, you would find a whitetail fawn painted into the curve of a stone. Farther up, there's a birdhouse with a family of raccoons handpainted in welcome.

It's these details that tell you Donn's garden is not just soil and seed. This place is hers, a place where her art and garden complement each other, one growing from the other.

Donn lives with her husband Ted in Williamsburg (and Hessel in summer, where they are Cloverland Electric Co-op members), and is mostly a self-taught artist who had her first success in high school.

"I remember my high school art teacher telling me to stay with it, to keep going with my art," she says. "Those words stayed with me." That year, she won an award for one of her sculptures. From there, she took one art course in college before life brought with it a family and a career.

"I had a full-time job and two children who, of course, loved to interrupt me," Donn says with a laugh.

As her schedule became tighter, her art had to wait. But once her children, Heather and Corey, were grown, she picked up her interest in art again. She started researching techniques and tools by checking out library books on art. Next, she took a decorative painting class.

"It was cutesy stuff," she says, "but I wanted to do more, do different things."

It wasn't until she took a workshop from Rod Lawrence, a well-known wildlife artist in Kalkaska, that she finally found her pace.

"I started learning how to draw animals, their fur, things like that. It was so inspiring," she says. "He really emphasized painting what you liked, things you were drawn to."

Donn soon started creating better, more detailed garden art, along with paintings like those of Roxie, her pet Pug, and of her son at a young age holding his father's hand.

She soon found herself experimenting with sculpting again, too—like the day she broke the lid of her ceramic olive oil bottle. Instead of tossing it, she sculpted a piece of clay into the shape of a playful woman, painted her with grapes in-hand, and topped the bottle herself.

Today, Donn is still learning as an artist and trying new things in her garden each summer. Her artwork can be found at a handful of area craft shows, but she sells most of it by word of mouth. (She was once commissioned to hand-paint rocks for a sports bar!).

Outside her garden and art, she is a special events planner at PAEM Solutions, a division of Passageways Travel in Traverse City, and can be reached at tvdonn@yahoo.com.

Photos Courtesy–Valerie Donn

Create Your Own...

Artist Valerie Donn encourages you to release your inner artist and create your own garden art. "Most people say, 'I can't do this!' but they would be surprised," she says. "Adding one small personal detail turns even a store-bought item into art."

Go online. Donn's favorite website is etsy.com, a snappy marketplace of homemade and vintage items from around the world, where she cruises for ideas and inspiration. "If I find something I like, I try it," she says. "It's fun to see what others are doing or, sometimes, to see if I'm doing something no one else is."

Hit the books. Donn visits the library and scouts out painting and photo books. If she finds something she likes, she makes a color copy to reference later, and paints pictures based on them.

Try it all. Consider working with stone, wood and/or glass. Looking at Donn's varied collection confirms that there is no one "way" to create.

Go simple. Use stencils, Donn says, to make a store-bought purchase your own. One of her projects was a plain, wooden birdhouse bought from the store. She painted it, then stenciled it. Voila! A one-of-a-kind, personal touch to her garden.

Buy the right paint. Donn purchases outdoor paint from craft stores like Michaels and Jo-Ann Fabrics & Crafts in Traverse City. "Outdoor patio paint won't fade," she says. "I have projects that have stood outside for years that haven't lost their color."

Protect it. Spray a clear finishing coat for the final touch on any outdoor project. Donn uses Krylon® acrylic clear coating, also from the craft store. "Be sure to get the non-yellowing outdoor coating," she says. This is key to keeping your craft in its original condition over the years.

Corn Is King

To get the best taste explosion from sweet corn, you need to grow it yourself. That way, you can "get the pan boiling and go pick the corn." It doesn't get any fresher than that, and regardless of where you live in Michigan, you can grow sweet corn. Here are some tips to get you planning your crop now, so you can enjoy the ultimate sweet taste of summer later.

Variety Selection

Sweet corn has been cross-bred more than most vegetables. Breeders are always seeking ways to make it sweeter, bigger and more disease resistance. There are four ways to classify sweet corn in regards to sugar content: normal sugary (su), sugary enhanced (se) and (se+), synergistic, and super sweet (sh2) (see yellow box for descriptions).

The goal is to choose a variety that both meets the approval of your taste buds and can be grown successfully in your area, based on the growing days listed on the packet. These refer to the number of *good* growing days available in your area. For example, if you have up to 75 days of warm weather, nights averaging in the lower 60s or better, then choose a variety that requires 75 days to maturity or less.

If you garden south of Gaylord, you're most likely in zone 5 and should have from 70-85 good growing days. Select your sweet corn variety accordingly. One of the sweetest I remember from growing up in the Thumb area is Illini Sweet Corn (sh2) (Burpee.com), an 85-day variety that produces very large, sweet ears. It holds its sugar content well, even if you don't cook it right away after picking it. Kandy Korn EH Yellow (se) (jungseed.com) is another 85-day variety, and a favorite among Jung customers. Of course, there are other varieties for southern Michigan growers, some that don't require as long a season, such as the popular Ambrosia Bicolor (se) from Jung's and Sugar Buns (se+), a 70-day, easy-to-grow variety from Johnny's Selected Seeds (johnnyseeds.com).

For northern gardeners, there are a few varieties that will do just fine in our cold belt, providing you follow the growing tips below. The varieties that have preformed consistently for me are Northern Extra Sweet Yellow (sh2), 67 days, and Early Xtra Sweet Yellow (sh2), a 68-day crop. These may produce a little smaller ear than the ones noted above, but they're just as tasty.

CORN TYPES: *What's the Difference?*

NORMAL SUGARY (su) • Traditional corn flavor, sugar turns to starch quickly after harvest.

SUGARY ENHANCED (se) and (se+) • Increased tenderness and varying sweetness.

SYNERGISTIC • Comprised of 75% se and 25% sh2; combining tenderness with super sweet.

SUPER SWEET (Sh2) • High sugar content, slow to turn to starch after picking.

Photos – © iStockphoto.com

Planting

Corn is a sun-loving crop that performs best over a long, hot summer. It is also a big feeder, so have an organic or inorganic fertilizer to use.

Plant your corn in fertile, well-drained soil. A slightly sandy soil is fine as long as you've added copious quantities of well-rotted manure or aged compost. And, planting seeds directly in the soil often works better than using transplants.

Consider ordering seeds that are coated with a fungicide, especially if your soil is slow to warm up in the spring. Corn should be planted no later than June 1 to have time to ripen. Plant in blocks of at least four rows side by side, to ensure good pollination. Most varieties need to be separated from others by at least 25 feet to avoid cross pollination, which can result in changes in starch and sugar.

As the seedlings emerge, fertilize lightly with an all-purpose liquid or low nitrogen organic fertilizer, such as Milorganite. Side-dress the plants about every two weeks with an organic or inorganic plant food. Take care not to apply too much nitrogen, and avoid direct contact with the roots. Water during dry spells and keep the rows properly weeded and cultivated. Also, thin the plants to at least 8 inches apart, as this move alone will help ensure ripe ears.

The three problems that seem to plague sweet corn are the ear worm, which bores directly into the ear, corn smut, and raccoons. Crop rotation can prevent the first problem from becoming endemic, but if these become a serious problem, treat with *Bacillus thuringiensis* (Bt). Raccoons can be a serious matter since they come around to spoil the party just as the ears are turning yellow. The best defense against raccoons has proven to be the tall woven fence that surrounds my garden.

Now, it's time to get eating. When the pot comes to boil, drop the shucked corn in for no more than three minutes. Sweet corn also tastes great in corn fritters and freezes real well, giving you the fresh taste of corn all year long.

Neil Moran is the author of "North Country Gardening with Wildflowers: A Guide to Growing and Enjoying Native Plants in the Upper Great Lakes Region."

A Corn Chip Worth Eating

Michigan-grown FarmBoy products are a tasty, organic harvest.

Corn. You can see it growing from spring to fall—those thick green leaves waving to us in the wind until they turn crispy gold and fly away. But did you know there are over 11,000 corn farmers in Michigan whose labor contributes over $1 billion per year to our economy?

The corn products you're probably most familiar with—fresh on the cob, frozen, canned, popcorn, and corn syrup—represent only a fraction of what is made with corn.

Another popular corn product is tortilla chips, and there are actually several producers in Michigan. One is in North Branch, and was nominated by *Country Lines* reader Cathy Isbell.

"Our favorite Michigan-made product is FarmBoyTortillaChips...made on the Simmons family farm," says Isbell, a member of Presque Isle Electric & Gas Co-op.

The farm's current owner, John Simmons, started working alongside his dad and uncle when he became big enough to ride a tractor. Now, at 56, he runs the 150-year-old farm under the brand names of FarmBoyTortillaChips and FarmBoyFlapJacks mixes, with help from his own family, especially daughter Stacey, who helps with the business side.

John Simmons is the owner of FarmBoyTortillaChips in North Branch.

In the early '90s, seeing demand for organic food on a steep rise, John decided to focus the entire farm on diverse organic production. Today, FarmBoyFlapJacks mixes and the heirloom corn that became FarmBoyTortillaChips are made with organic grains.

"Much of the planning was similar to the planning involved in farming—projections of ingredient needs, costs versus projected revenues, storage requirements, and cash flow versus expense flow projections," he says of the transition. "Some new considerations were packaging, label creation, promotion of products, and public relations."

FarmBoyTortillaChips are packaged in unpretentious brown paper bags with white stickers illustrating John himself, and exclaiming "Heirloom Corn!" and "No GMO."

But, what he loves most about running his business is the people. "I love the interaction with people—retail store owners, restaurant owners, cooks/chefs, wait-staff, consumers—every person who tastes the food I've grown and prepared, and reacts with an expression of surprise, satisfaction and joy!"

"Much of what I've found leading to success in my food business may be contrary to industry norms," he adds. "I have an unusual product line, and as an innovator, I've just had to 'figure some things out' through trial and error."

John is happy to talk details about his corn chips, and he is not a bystander in their production. "We use open-pollinated heirloom corn, which gives our chips an amazing depth of flavor," he explains. The corn is then parched and prepared into homestyle tortilla chips that are fried in organic sunflower oil.

For the future, he continues, "I hope to expand production and provide delicious wholesome food to as many people as I can."

FarmBoyTortillaChips are sold in over 50 stores throughout the state, and now in Illinois and Kentucky. Chip varieties include Celtic Sea Salt, Lime, Garlic, Jalapeño, Cracked Black Pepper, and Holiday Spice. To find a store near you, visit farmboytortillachips.com or order directly from the website.

"My favorite chip person who I meet at food shows is a person that says, 'Oh, I don't eat corn chips,'" John laughs. And he responds, "Well, perhaps you've never had a corn chip worth eating!"

Writer Jodi Bollaert is a lifelong Michigan resident and enthusiastic locavore (person interested in eating food that is locally produced, not moved long distances to market). Find more wonderful Michigan-made products on her special listing at facebook.com/favoritemichiganproducts.

Tell us about your favorite, or a unique, Michigan-made product. Email your submission to czuker@meca.coop or send to: *Country Lines,* 2859 W. Jolly Rd., Okemos, MI 48864. Be sure to share why you like it, or a unique story to go with it.

Photo – © iStockphoto.com

Tech Tips for Tots

Modern technology tools help us learn anytime, anyplace.

No area has greater potential to transform the lives of children than education. And no technological innovation in our lifetime has greater potential to transform education than broadband internet. That's a message from more than 150 rural education and technology experts who participated in a National Rural Education Technology Summit in July 2011.

Paired with mobile devices like the iPad, the internet is expanding access to more teachers and lessons—which can be a big boost for rural communities. Modern technology can make learning more personal and engaging, and it can turn a remote schoolhouse into a global community of learners.

Technology can also turn a grandma into a liar.

In my defense, the child's mother made me do it. She claimed the only way to get my grandson to nap during a recent road trip was to pretend my iPad batteries had died. Since a tired 2-year-old is no one to mess with, I played along.

Not everyone approves of computer use for children under age 3. Critics prefer toddlers to learn through their bodies, first mastering developmental skills such as crawling, walking, talking, and making friends.

Try telling that to a toddler trapped in a car seat—especially after he's saved a story with "Super Why," and actually made "the wheels on the bus go 'round and 'round" (over and over, and over again).

The truth is, tablet computers like the iPad change the technology game considerably. The big screen, touch interface, and fun learning apps make it a child magnet, prompting both *ComputerWorld* and *The New York Times* to call the iPad the "toy of the year" in 2010.

Rural Learners Gaining Ground

The benefits of educational technology for school-aged children are even greater. And in rural schools, technological developments are helping to launch students into the outside world.

Just look at the payback from online learning alone—for learners of any age.

- **Unlimited access:** Students gain knowledge and information from recognized experts at a minimal cost.
- **Flexibility and convenience:** Online learning is available 24/7. This flexibility makes it possible for learners to take breaks for work, sports, travel, or even child care.
- **Job-readiness:** The workplace is going progressively digital. E-learning has made it possible to acquire digital literacy skills.
- **Mobility:** The learner does not need to commute every day to gain knowledge.
- **Accessibility:** The learner can access information from any location with an internet connection.

Lack of Connectivity Still Limits Results

In too many rural communities, however, lack of connection prevents students from joining the technology revolution. For many rural districts, infrastructure, including little or no access to broadband or the internet, is among their biggest problems. The 2011 report, "Bringing Broadband to Rural America" (available at fcc.gov), revealed 28 percent of rural Americans lacked access to broadband, compared to 3 percent who lack access in non-rural areas.

Rural schools are also less likely to have full-time tech-savvy leaders, with only 36 percent of rural districts reporting they had such staff members compared to 79 percent of city districts, according to a 2008 U.S. Department of Education report. Twenty-three percent of rural districts didn't have any sort of technology leader.

There is hope on the horizon. Connect Michigan (connectmi.org) has partnered with the Michigan Public Service Commission to engage in a comprehensive broadband planning and technology initiative as part of a national effort to map and expand access to high-speed mobile broadband service across rural Michigan. They have a champion in President Barack Obama, who has set a national goal of ensuring 98 percent of Americans have broadband internet access within the next five years.

And a handful of technology-related partnerships are developing between rural districts and universities, such as Vanderbilt University's Aspirnaut program, which includes a "one-room school on wheels" where students use laptops to work on STEM (science/technology/engineering/mathematics) content during lengthy bus commutes.

Which brings me back to that road trip. Once my little back-seat buddy nodded off, I slipped out my "sleeping" iPad to help pass the time. I'd no sooner flung my first angry bird when I heard a sleepy, "Hey, what you doin,' grandma?"

I was so busted.

Start early, start smart

It's up to adults to keep children safe online, and select software and settings that fit the way young children develop and learn.

KEEP IT SOCIAL – Allow children to work together at computers, they'll gain social and communication skills.

KEEP IT IN BALANCE – Limit screen time; allow for plenty of active play.

SET THE STAGE – Technology should be included in the main learning area, rather than in a separate room, so it can be monitored, and adults can comment on what's happening. Hide wires and keep the screen free of glare.

MAKE LEARNING KEY – Researchers agree, software for young children should: • Encourage exploration, imagination and problem solving • Reflect and build on what children already know • Involve many senses and include sound, music and voice • Be open-ended, with the child in control.

Resources

- **netc.org/earlyconnections** – Tips for using computers in learning at all ages.
- **childrenandcomputers.com** – Software and websites appropriate for young children.
- **connsensebulletin.com** – Includes tips for children with special needs.
- **pbslearningmedia.org** – Thousands of classroom-ready, digital resources, even in-depth lesson plans. PBS LearningMedia™ is free for educators.

Source – Scott Bauer/USDA

The deadly parasitic Varroa mite on the back of this honey bee is one of many pests the U.S. Department of Agriculture is trying to combat without harming the bee.

Guarding the Honey Bee

Honey bees have existed for millions of years and supplied honey for the human race since the Stone Age, but there is great concern that their benefits to the world will be diminished, if not lost. However, with a little help from homeowners and other concerned citizens there is hope for their future—and ours.

These amazing and almost mythic creatures have a highly developed social structure that has helped sustain humankind and human society.

Once thought to be native to South Asia and the South East Asia subregion, recent studies indicate honey bees may also be native to Africa and probably all continents except North America. Cave drawings also indicate that early humans recognized the value of honey.

As humans learned to domesticate honey bees the art of beekeeping grew, and today they also provide us with beeswax, propolis (a bee glue used in cosmetics and health supplements) and pollination services.

Though several species exist, only two have been domesticated (the Egyptians were among the first to do so), and only one *(Apis mellifera)* is used extensively for domestic honey production and pollination.

An average well-managed domestic hive will hold 50,000 bees (sometimes as high as 80,000) in mid-summer. Bees from one hive can gather up to 80 pounds of pollen, and produce well over 100 pounds of honey annually.

Honey bees generally visit flowers to collect pollen, their source of protein, and in the process are responsible for about 80 percent of all insect pollination. This service is valued in the billions of dollars, and without it many commercial and home-grown food crops would be greatly reduced.

In 2007, honey bees made the news because a disturbing number (30 to 70 percent) of North American European hives collapsed. This sudden, unprecedented decline was named colony collapse disorder (CCD). Researchers have not found a specific cause, but many scientists suspect a combination of factors rather than a single pathogen or poison. This may include loss of habitat, changes in agricultural practices, new viruses and pathogens, extreme weather during the past decade which resulted in impaired protein (pollen) production, and the possible synergistic effects of any combination of these factors.

A decline in beekeeping is another contributing factor to the population decline that has been taking place since the 1950s, notes Tim Tucker, a member of the American Beekeeping Federation's Membership and Marketing Committee and editor of ABF's E-Buzz newsletter.

"For many years the cause of decline was economic in nature and tied to the availability of other sweeteners on the market," he explains. Access to inexpensive sugar and high fructose corn sugar (HFCS) has caused many people to stop using honey as a home sweetener.

"With relatively cheap sweetener prices, we no longer consume much honey on a per-person basis—less than 2 pounds per year," he said. "On the other hand, we consume more than 100 pounds of refined sugars and HFCS per person and some estimates are much higher than that.

"This caused honey prices for many years to stay so low as to make it difficult to make a living and many commercial beekeepers gave up their operations," he adds.

Compounding that problem are the health issues of honey bees. "In the last 20 years we have had two new parasitic mites come into the country, and the varroa mite vectors as many as 17 to 20 different viruses that affect honey bee health," he continues. This has increased the cost of keeping bees alive, resulting in additional beekeepers giving up this important work for jobs in other fields.

"Without a corresponding rise in pollinating fees over the past 15 years or so, many of the larger beekeepers that are still in existence would likely have gone out of business as well," Tucker says.

Though research indicates that the use of chemicals in home gardens and landscapes has not contributed to CCD, Tucker says homeowners can still help protect these amazing and economically important creatures.

"The main thing homeowners can do is provide plantings of beneficial flowers that bloom during the full season to provide nectar for honey bees and all native pollinators."

"The second thing is to educate the public to accept a lower level of perfection in their yards and gardens and use less herbicides and pesticides that can affect pollinators," he continues. "It is not a good thing to treat our lawns to remove clovers and even dandelions that provide nectar to bees. While it makes for a less perfect looking lawn, it is more natural and beneficial to the bees."

According to Tucker, white clovers and native wild flowers, trees and shrubs that provide lots of pollen and nectar are wonderful additions to yards and landscapes. Shrubs such as spirea, currents, blackberries, blueberries and even honeysuckle are great choices. Beneficial trees include all fruit-producing and ornamental varieties such as Bradford pears and black locusts.

Homeowners certainly can take up beekeeping themselves. Courses are available in every state, often through local beekeeping associations and Cooperative Extension units. If beekeeping is not feasible, homeowners can still help by providing locations for beekeepers to place bees—especially on the outskirts of towns and suburban environments, but also in the countryside, Tucker says.

So, what's the course of action if a swarm of honey bees show up on its own? Because they can pose a threat to people and animals, and because the swarm may be the more aggressive strain of Africanized honey bees, Tucker suggests calling a local beekeeper to have them removed.

To learn more about honey bees and beekeeping, visit the ABF site at abfnet.org or contact a county or regional Cooperative Extension office for sources of local information and help.

– Tim Tucker

Meatless Meals

You don't always need meat to create a tasty dish. These meatless recipes are flavor-filled and sure to fill you up. They're so delicious even meat-eaters won't miss a thing.
Visit **countrylines.com** for hundreds more reader recipes.

Margherita Pizza

1 T. olive oil
2 T. pizza sauce
1 pre-made whole wheat or white pizza crust
3/4 of 12-oz. jar diced tomatoes, drained
2 T. sliced yellow (mild) peppers
2 T. chopped fresh basil leaves
8 ozs. shredded mozzarella cheese

Preheat oven to 450° (or directions on crust package). Mix olive oil with pizza sauce and spread evenly onto crust. Add tomatoes, peppers, basil and cheese, making sure all ingredients are evenly distributed around crust. Bake for 12-15 min or until desired crispness.

Christin Russman

Photography by: 831 Creative

Teriyaki Turnovers

16 oz. pkg. frozen Athens Fillo Dough, thawed
1 T. olive oil
1 stalk celery, finely chopped
1 sm. head broccoli, finely chopped or 10-oz. pkg. frozen, chopped
5-oz can water chestnuts, finely chopped
6 T. teriyaki marinade or sauce
1 bunch chopped green onion (save 2 stalks, also chopped, 1 for dipping sauce and 1 for garnish)
3 ozs. roasted cashews (2 ozs. chopped and 1 oz. finely minced for garnish)
1/2 c. butter
Dipping Sauce:
1/4 c. Swanson vegetable broth
1/4 c. teriyaki marinade or sauce
1 T. chopped green onion
2 T. Asian (Lee Kum Kee) Chili Garlic Sauce

Set oven to 375°. Sauté celery in olive oil until slightly soft. Add broccoli and water chestnuts and sauté for 3 more minutes; drizzle with 4 to 6 tablespoons teriyaki sauce. Mix in 2/3 of raw green onion and 2 ounces cashews. Set aside.

Heat 1/2 cup butter in a small microwaveable bowl until melted (approx. 20 sec). Brush very thin layer onto 1 sheet of dough, repeat adding a second layer, and third if desired. (You must keep dough you're not using from drying out by placing a wet and wrung paper towel on top until ready for next sheet. Work quickly so dough doesn't dry out and crumble.)

Add 1/4 cup of broccoli mixture placing in

Olive and Mozzarella Orzo


Margherita Pizza

the bottom corner of dough. Fold the empty side over then continue folding into a large triangle. Place on cookie sheet lined with parchment paper and repeat process until broccoli mixture is all used. Makes about 6 turnovers. Bake for 15 min and serve with dipping sauce.

Mary Gorshe, Suttons Bay

Grilled Tuscan Salad on a Stick

Place any combination of the following on a skewer:
colored bell peppers, cut in pieces
cherry tomatoes
zucchini, cut in rounds
summer squash, cut in rounds
mushrooms
artichoke hearts
onions, cut in chunks

Grill the vegetables and place on a bed of greens, such as Romaine or baby leaf lettuce.

Tuscan Salad Dressing:
3 T. mayonnaise
1/3 c. red wine vinegar
1/2 c. water
2 t. lemon juice
2 T. parmesan cheese
3 T. olive oil
1 sm. clove garlic, minced
1/4 t. dried oregano
1/4 t. dried basil
1/4 t. thyme
1/8 t. black pepper

Combine ingredients in a blender and drizzle over the salad.

Julie Dennison, Roscommon

Olive and Mozzarella Orzo

1 lb. orzo pasta
1 1/2 c. chopped onion
2 T. olive oil
2 T. butter
2 c. chopped celery
2 T. flour
1 c. water
1 t. chicken bouillon
1 28-oz. can tomatoes, drained and chopped
1 t. basil
1 t. oregano
1/4 t. cayenne
1/2 lb. pitted Kalamata olives, chopped
3/4 lb. mozzarella cheese, cut into 1/4" pieces

Cook orzo till almost done, drain and place in large bowl. Cook onion in oil and butter over medium-low heat, stirring until soft. Add celery and cook; stir for 5 min. Stir in flour and cook 3 min. Stir in water, boullion, tomatoes, basil, oregano and cayenne. Simmer 5 min. Stir into orzo with olives, 1/2 lb. mozzarella and salt to taste. Transfer to 2-qt. casserole. Cut remaining cheese into strips and arrange decoratively on top. Bake at 400° for 30 min, or until heated through.

Vicky Hueter, Lovells

Galuski

1 med. head cabbage
1/4 c. butter
salt to taste
pepper to taste
generous dash paprika
1 8-oz. pkg. Kluski noodles

Shred cabbage finely. Melt butter in large skillet; add cabbage with salt, pepper and paprika. Cook noodles in boiling salted water until tender; drain. Mix with cabbage and fry until brown.

Janice Harvey, Charlevoix

Mock Tuna Salad

2 15-oz. cans garbanzo beans
1 red bell pepper, finely chopped
2 carrots, peeled and finely chopped
2 celery stalks, finely chopped
1 med. onion, finely chopped
2 T. finely chopped fresh cilantro
1 c. chopped walnuts
1 T. dijon mustard
3/4-1 c. mayonnaise
salt and pepper to taste

Drain garbanzo beans. Mix in food processor until flaky. Combine all chopped vegetables with beans by hand. Mix mustard, mayonnaise, and salt and pepper together and add to bean/veggie mixture. Serve as sandwiches.

Geralyn Guild, Grand Ledge

Squash Bisque *(Pictured above)*

1/2 c. chopped onion
2 T. grated fresh ginger
1 T. olive oil
3 c. cooked, peeled butternut squash
3 c. vegetable broth
1 c. evaporated skim milk
1/8 t. nutmeg
salt and pepper to taste

Sauté onion and ginger in olive oil, then stir in squash and broth. Cook 5 minutes, and then puree in blender. Return to saucepan and add remaining ingredients, heat until hot. Serve with hearty bread and a good salad.

Jill Justin

SUBMIT YOUR RECIPE! Contributors whose recipes we print in 2012 will be entered in a drawing. We'll draw one winner in December and pay their January 2013 electric bill (up to $200) as a prize.

Thanks to all who sent in recipes! Upcoming: Please send in your **CREPE** recipes by March 10, **RECIPES FOR KIDS** by April 10 and **FRESH FROM THE GARDEN** recipes by May 10. Mail to: *Country Lines Recipes*, 2859 W. Jolly Rd., Okemos, MI 48864; or email recipes@countrylines.com.

Transformers lower voltage to a level that's safe for use in your home.

Reclosers protect lines and consumers from short circuits and allow temporary faults to clear, which helps keep service energized without needless interruptions.

Capacitors improve power quality by preventing it from being wasted and boosting the voltage on long distribution lines.

Photos – Shelby Energy Cooperative; United Utility Supply

A Spotter's Guide to Distribution Poles

Ever look up at a utility pole and wonder: "What is all that stuff?"

While wires are easy—everyone knows they carry electricity—how about those attached metal boxes and other mysterious gadgets? What are they called, and what purpose do they serve?

With a little information, you can understand a lot more about the utility lines you pass every day. Not only could "pole spotting" shed light on the work done by your local electric co-op, you just might be able to impress your friends and family. A guide to pole-spotting follows. Please keep in mind:

Utility poles are not for climbing! Looking is okay, but keep a safe distance from all equipment described here.

The measurements and descriptions given here represent common configurations, but in the real world, design varies greatly. Part of why electric co-op employees undergo such extensive training is to enable them to identify components in the field with a high level of confidence and certainty.

Transmission vs. Distribution

First, make sure that the pole you're looking at is a distribution pole and not a transmission pole.

Distribution poles are those you see in your neighborhood, unless your distribution lines run underground. They are generally up to 55 feet high and made of wood. Power running through distribution lines ranges from 4,600 volts to 33,000 volts.

Transmission lines are designed to carry electricity longer distances and at higher voltages—69,000 volts and above. Relative to distribution poles, transmission poles are much larger—from 55 feet to over100 feet—with the conductors higher off the ground. Some large transmission lines use steel poles and tower structures.

In cases where a pole carries both transmission and distribution lines, the transmission lines will run above distribution lines. An easy rule to follow is the lower the voltage of the line, the lower it is on the pole.

Four Common Devices

- **Transformers** are something most people can already spot—they're hefty metal cylinders that hang off the poles. The transformer that connects your home to a distribution line lowers the distribution voltage to what you need in your house—generally 120 volts for outlets and 240 volts for your air conditioner and clothes dryer. At the top of a transformer, you'll see bushings—ceramic projections with several disks running around the outside. On the inside of bushings are metal conductors; the outsides are insulators, so that when they attach to a transformer the metal casing doesn't become electrically charged.
- **Capacitors** look somewhat like transformers, with bushings on top, but have flat, rectangular casings. While transformers change voltage, capacitors improve the power factor on the utility lines—they prevent power from being wasted and help boost the voltage on long rural distribution lines.
- **Reclosers** protect lines and consumers from short circuits. For example, if a tree branch touches a line, electric current will flow through the tree, burning it and overheating the wire. Eventually, this will result in a fault that causes a protective device, like a fuse or circuit breaker, to operate and interrupt the power. Circuit breakers "open" the circuit, cutting off the power. Because many shorts correct themselves in a few seconds—as the high current will usually burn a tree limb away from the line—most modern circuit breakers have a mechanism that allows them to reclose a moment later (hence the name recloser). Like transformers and capacitors, reclosers also have bushings. They tend to be rectangular, like capacitors, but squatter.
- **Fuses** are also designed to protect lines and homes from short circuits. But fuses are one-shot devices—a fault, like the tree branch described above, on the load side of the fuse will cause them to burn out. High-voltage fuses look like a bar offset from the pole by one or more insulators. When a fuse blows, lineworkers have to go out and find why the fuse blew, fix the problem, and re-fuse the line to restore power. These four devices are the most common on distribution poles. Once you know what they look like, you'll realize you've been seeing them every day for years.

– Maurice Martin,
Cooperative Research Network

Fuel Mix Report

The environmental characteristics of Presque Isle Electric & Gas Co-op as required by Public Act 141 of 2000 for the 12-month period ended 12/31/11.

COMPARISON OF FUEL SOURCES USED

FUEL SOURCE	Your co-op's fuel mix	Regional average fuel mix used
Coal	77.9%	64.7%
Nuclear	11.6%	24.0%
Gas	5.3%	7.1%
Oil	0.1%	0.4%
Hydroelectric	1.1%	3.1%
Renewable Fuels	4.0%	3.1%
Biomass	*0.1%*	*0.4%*
Biofuel	*0.0%*	*0.1%*
Solid Waste Incineration	*0.1%*	*0.4%*
Wind	*3.7%*	*1.7%*
Wood	*0.1%*	*0.4%*
Solar	*0.0%*	*0.0%*

NOTE: (1) Biomass above excludes wood; solid waste incineration includes landfill gas, and (2) inclusion of long-term renewable (wind) purchase power contract in Wolverine's mix.

Your Co-op's Fuel Mix

Regional Avg. Fuel Mix

EMISSIONS AND WASTE COMPARISON

TYPE OF EMISSIONS/WASTE	lbs/MWh Your Co-op	lbs/MWh Regional Average*
Sulfur Dioxide	5.9	8.2
Carbon Dioxide	1,804	2,186
Oxides of Nitrogen	2.0	2.0
High-level nuclear waste	0.0042	0.0083

*Regional average fuel mix data was compiled from Michigan, Illinois, Indiana, Ohio and Wisconsin.

Presque Isle Electric & Gas purchases 100% of its electricity from Wolverine Power Cooperative, which provided this fuel mix and environmental data.

Raffle Winners

In celebration of PIE&G's 75th anniversary in 2012, three lucky members will be randomly selected each month to receive a $75 credit on their active electric or natural gas account. Winners will be selected monthly from each of our three billing cycles. Each member is eligible to win one time only, and PIE&G directors and employees are excluded.

January winners:

Cycle 1 – Dallas Hyde
Cycle 2 – Keith Atkinson
Cycle 3 – Debra Eggenschwiller

February winners:

Cycle 1 – Harriet Powers
Cycle 2 – Norman Pesonen
Cycle 3 – Lori Fielder

Scholarships Available

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

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

How Can I Help My Community?

The PIE&G Communities First Fund was created in 1998. The funds for this program are generated when PIE&G members volunteer to "round up" their utility bills to the next dollar. The average cost is 50 cents per month, or $6 per year. All contributions are tax deductible.

You can participate by calling our Member Services Department at 800-423-6634, by mailing the coupon below with your next payment, or enrolling online at pieg.com and clicking on "Contact Us."

A $2,300 Communities First Fund grant was recently awarded to **Inland Lakes Schools** for two computer/projector/camera workstations for online classroom instruction.

Yes! I want to participate in the COMMUNITIES FIRST FUND. Please "round-up" my bill to the next highest dollar each month.

Name (please print) _____

Phone Number _____

Mailing Address _____

_____

Signature _____

Include this coupon in your next bill payment, or mail to:
PIE&G COMMUNITIES FIRST FUND, P.O. Box 308, Onaway, MI 49765

POWER SUPPLY UPDATE

Focus Shifts for WCEV

Wolverine Power Cooperative plans to continue development of the Wolverine Clean Energy Venture (WCEV) near Rogers City in 2012, although work on the project is expected to be limited.

"New emission rules passed by the U.S. Environmental Protection Agency (EPA) in December 2011 make construction of a new power plant extremely difficult for any utility in the country," says Brian Warner, director of environmental services for Wolverine. "Equipment vendors we have talked with agree."

A rendering of the Wolverine Clean Energy Venture power plant.

Wolverine received an air quality permit for the WCEV project from the Michigan Department of Environment Quality (MDEQ) in June 2011. Under state and federal law, the co-op has 18 months from the permit issue date to commence construction.

Prior to the new EPA rules, Wolverine was in the process of preparing formal bid packages for key components of the project, including boilers, turbines and foundations. The cooperative expected to seek bids from potential vendors in early 2012.

"We have suspended the bid process for now and shifted our focus to legal defense of our air permit and monitoring of regulatory and political developments," Warner says. "We continue to believe the Rogers City site is a world-class location for electric generation."

The WCEV, proposed by Wolverine in May 2006, would consist of two generating units, each capable of producing 300 megawatts of baseload electricity. Baseload units are typically operated 24 hours a day, seven days a week.

Baseload Opportunity in Marquette

Wolverine signed a letter of intent with We Energies in January 2012 to evaluate formation of a joint venture that could lead to environmental improvements at the We Energies power plant in Marquette and shared ownership of the facility.

The Marquette power plant has five units, each capable of generating approximately 85 megawatts of baseload electricity. The plant was built between 1974 and 1979 and is currently staffed with 170 full-time employees.

Wolverine and We Energies have started evaluating the technical, economic and regulatory feasibility of installing state-of-the-art emission controls on the units to meet environmental regulations.

"We expect our due diligence efforts at the plant to take about six months, during which time Wolverine and We Energies will also negotiate definitive agreements for the potential joint venture," says Dan DeCoeur, vice president of power supply for Wolverine. "A decision on whether to proceed is expected by summer 2012."

We Energies' Marquette power plant.

If the joint venture moves forward, Wolverine could own up to 60 percent of the Marquette plant's output. Wolverine is considering a joint venture with We Energies as part of its continuing efforts to secure reliable baseload power supply at a competitive price for its members.

We Energies serves more than 1.1 million electric customers in Wisconsin and the Upper Peninsula, and over 1 million natural gas customers in Wisconsin.

Source – Champion Window

The seat sections for bay or bow windows can have a layer of foam insulation to reduce heat loss and improve comfort for people and plants.

Creating a Sunny Spot

Q: *I have an old picture window I want to replace with a bow or bay window. My budget is tight. Which type is best and most efficient? Should I buy an entire unit or assemble one from individual windows?*

A: Bow and bay windows are an attractive and affordable way to create a sunny spot for plants, pets or people. While today's models are much more efficient than the large, single-pane picture windows common in older homes, there are several factors to consider when choosing one for your home.

Bow vs. Bay

A bow or bay window is sometimes called the "poor man's sunroom," because it can provide some sunroom benefits at a lower cost. But what's the difference between bow and bay windows?

A bow window is made of four or more (five is most common) narrow window panels, often of the same width. Using more window panels creates a circular appearance, which many people find attractive. Often, only the two end windows can be opened, but you can order them so they all open.

By comparison, a bay window is made from just three window panels. The fixed center window is similar to a smaller picture window, with an unobstructed view of the outdoors. A bay window can provide more of a mini-sunroom feel because it extends further from the house wall, providing more space for plants or a bench seat.

Efficiency and Payback

Replacing an old picture window will increase efficiency and reduce utility bills, but don't make the decision based on efficiency alone. It will take many years of energy bill savings to pay back the entire cost.

In terms of energy efficiency and durability, there is not a significant difference between bow and bay windows. As with any replacement window style, the glass is the heart of the window. Select the most energy-efficient glass your budget will allow, even if it forces you to cut back on styling or trim options. At the very minimum, select double-pane glass with a low-emissivity coating and inert gas in the gap between the panes.

Unless you are very handy with tools, it is better to buy an entire unit designed as a bow or bay window. This costs a little more than assembling one from individual windows, but it will likely be stronger and more airtight.

Whichever model you choose, you will enjoy the comfort and energy efficiency of your new "sunny spot" for years to come.

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

NEXT STEPS:

Ready to add a sunny spot to your home? Here are some companies that manufacture bay and bow windows:

Champion Windows:
800-875-5575 • championwindow.com

Peachtree:
800-732-2499 • peachtreedoor.com

Thermal Industries:
800-245-1540 • thermalindustries.com

Weathershield Windows:
800-222-2995 • weathershield.com

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

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

NOTICE OF HEARING
FOR THE MICHIGAN REGULATED GAS DIVISION CUSTOMERS OF
PRESQUE ISLE ELECTRIC & GAS CO-OP
CASE NO. U-16926

- Presque Isle Electric & Gas Co-op proposes to implement a uniform gas cost recovery plan and gas cost recovery factor of $0.5764 per hundred cubic feet for the months of April 1, 2012 through March 31, 2013, plus additional amounts contingent on future events for its Regulated Gas Division, if the Michigan Public Service Commission approves its request.
- The information below describes how a person may participate in this case.
- You may call or write Presque Isle Electric & Gas Co-op, 19831 M-68, P.O. Box 308, Onaway, Michigan 49765, (800) 423-6634 for a free copy of its application. Any person may review the application at the offices of Presque Isle Electric & Gas Co-op.
- The first public hearing in these matters will be held:

DATE/TIME: March 27, 2012, at 9:00 a.m. This hearing will be a prehearing conference to set future hearing dates and decide other procedural matters.

BEFORE: Administrative Law Judge Thomas E. Maier

LOCATION: Michigan Public Service Commission, 6545 Mercantile Way, Suite 7, Lansing, Michigan

The Mercantile Way building sustained flood damage and remains closed until further notice. Please consult the Michigan Public Service Commission website at: michigan.gov/mpsc for updates on hearing locations or call 517.241.6060.

PARTICIPATION: Any interested person may attend and participate. The hearing site is accessible, including handicapped parking. Persons needing any accommodation to participate should contact the Commission's Executive Secretary at (517) 241-6160 in advance to request mobility, visual, hearing or other assistance.

The Michigan Public Service Commission (Commission) will hold a public hearing to consider the December 29, 2011 application of Presque Isle Electric & Gas Co-op (Presque Isle) for approval of a gas cost recovery (GCR) plan and gas cost recovery factor of $0.5764 per hundred cubic feet (CCF) for the months of April 2012 through March 2013, plus additional amounts contingent on future events for its Regulated Gas Division. Presque Isle's requested contingent GCR factor ceiling prices would be calculated using a Quarterly Adjustment Process to reflect increases in the price of gas on the New York Mercantile Exchange (NYMEX).

All documents filed in this case shall be submitted electronically through the Commission's E-Dockets website at: michigan.gov/mpscedockets. Requirements and instructions for filing can be found in the User Manual on the E-Dockets help page. Documents may also be submitted, in Word or PDF format, as an attachment to an email sent to: mpscedockets@michigan.gov. If you require assistance prior to e-filing, contact Commission staff at (517) 241-6180 or by email at: mpscedockets@michigan.gov.

Any person wishing to intervene and become a party to the case shall electronically file a petition to intervene with this Commission by March 20, 2012. (Interested persons may elect to file using the traditional paper format.) The proof of service shall indicate service upon Presque Isle's attorney, Bret A. Totoraitis, Dykema Gossett PLLC, Capitol View, 201 Townsend Street, Suite 900, Lansing, Michigan 48933.

Any person wishing to make a statement of position without becoming a party to the case may participate by filing an appearance. To file an appearance, the individual must attend the hearing and advise the presiding administrative law judge of his or her wish to make a statement of position. All information submitted to the Commission in this matter will become public information: available on the Michigan Public Service Commission's website, and subject to disclosure.

Requests for adjournment must be made pursuant to the Commission's Rules of Practice and Procedure R 460.17315 and R 460.17335. Requests for further information on adjournment should be directed to (517) 241-6060.

A copy of Presque Isle's request may be reviewed on the Commission's website at: michigan.gov/mpscedockets and at the office of Presque Isle Electric & Gas Co-op, 19831 M-68, Onaway, Michigan. For more information on how to participate in a case, you may contact the Commission at the above address or by telephone at (517) 241-6180.

Jurisdiction is pursuant to 1909 PA 300, as amended, MCL 462.2 et seq.; 1919 PA 419, as amended, MCL 460.54 et seq.; 1939 PA 3, as amended, MCL 460.1 et seq.; 1982 PA 304, as amended, MCL 460.6h et seq.; 1969 PA 306, as amended, MCL 24.201 et seq.; and the Commission's Rules of Practice and Procedure, as amended, 1999 AC, R 460.17101 et seq.

February 1, 2012

Staying Safe With Portable Generators

CARBON MONOXIDE HAZARDS:

- Always use generators outdoors. ***Never*** use them in homes, garages, basements, or enclosed areas, even with ventilation.
- Install battery-operated or plug-in (with battery backup) carbon monoxide (CO) alarms in your home, and follow manufacturer instructions. Test alarms often and replace batteries when needed.

ELECTRICAL HAZARDS:

- Plug appliances directly into generator or use a heavy-duty outdoor-rated extension cord.
- ***Never*** plug a generator into a wall outlet or connect it to your home's wiring. If whole-house use is required, have a licensed electrician install the equipment to safely connect emergency generators.

Contact Presque Isle Electric & Gas Co-op at 800-423-6634 with any questions about using your generator safely!

Don't Mess With Power Lines

Downed power lines carry a current strong enough to cause serious injury or death. If you see a downed line, follow these safety tips:

- Move away from the downed line, and anything touching it, by shuffling with small steps, keeping your feet together and on the ground at all times. This minimizes the potential for an electric shock. Electricity wants to move from a high voltage zone to a low voltage one—and it can do that through your body.
- Do not touch anyone who is in direct or indirect contact with a downed line—you could become the next victim. Call 911 instead.
- Do not try to move a downed line or anything contacting it by using another object, such as a stick. Even normally nonconductive materials like wood or cloth, if slightly wet, can conduct electricity and electrocute you.
- Be careful not to put your feet near water where a downed power line is located.
- Do not drive over downed lines.
- If you are in a vehicle that is touching a downed line, stay in the vehicle. Honk your horn for help and tell others to stay away.
- If you must leave the vehicle because it's on fire, jump out with both feet together and avoid touching the energized vehicle and the ground at the same time. This way you avoid being the path of electricity from the vehicle to the earth.

The Old Man and The Ski

Ed Harjala turns 90 years old this month, but that isn't keeping him from entering his 20th cross-country ski race.

Photo Courtesy – Harjala Family

What would life be like without a hero? I don't know because I've had a few. I met one of my heroes over a decade ago. I watched this unimposing cross-country skier munching on a Pasty in Calumet, MI, after the Great Bear Chase Ski Race. I knew I had to meet him and worked up the courage to go to his table. We are friends now and he is still my hero.

Ed Harjala was 75 years old in 1998 when he lined up for the American Berkibeiner Ski Race, a thirty-one mile venture through the torturous hills of Northwest Wisconsin. By mid-race he was averaging over ten miles an hour and on pace to break three hours for the marathon. That's three hours at age 75.

As fate would have it, Ed collided with a fallen skier and subsequently, a tree. His arm splintered in several places and he has a permanent plate of steel in the region as a reminder. He didn't get his sub-3-hour Berkie. He didn't stop skiing either. A few days later, he was back on the skating tracks at the SwedeTown Trails in Calumet, near his hometown of Copper City in Michigan's Upper Peninsula. He adjusted by using one pole and letting his wounded arm hang at his side. His wife, Dots, (Dorothy), drove him to the trails.

Ed is 89 years old now. He's slowed down some but, after all, he's not 75 anymore. At 75, he would ski 25 kilometers daily. He was still doing that a handful of winters ago. Now he deals with heart issues and a foot that doesn't serve him the way it once did. But he's still a master of enthusiasm and artful skiing. He's "The Old Man and the Ski." Sorry, Hemingway, this guy has earned the title.

"When I was young, in my 70s, I would roller-ski 2,000 miles each summer," Ed says. "Two years ago I was still roller skiing 700 miles a summer. Anyway, roller skiing is too easy."

Ed was also doing two hour workouts rowing his wooden pram near his cottage on Lake Superior. He would row along shore one way for an hour (1,600 strokes). Then he would turn back and head for home.

At age 87, Ed was out on one of his morning roller-ski workouts when he spotted a patch on the highway ahead of him that looked to be new cement. As he got closer he realized that it was a slick from spilled cooking oil, (UP bear bait). Ed couldn't stop, slid onto the slick, and fell on his shoulder, wrenching it badly. "Just lucky I had a leather elbow patch on my shirt, to repair a tear, or my elbow would have been skinned up pretty good too."

Twenty years earlier, at the age of 67, Ed was still in wave 1 at the Berkie. "At (age 85), I was in Wave 3," Ed says. "Now I'm in Wave 9. I'm just moving now." Just moving now? Tell that to the other 89 year-olds on the planet.

Ed's last long Berkie was in 2006. His lungs don't quite give him the lift they once did. He also strides now instead of skating because, "Striding feels easier."

He has entered the Kortolopet these past years, the Berkie's 23 kilometer event. He missed last year's event.

Ed has completed 19 Berkies and needs one more to qualify for the commemorative 'Birch Leggings' bib given to those who finish 20 full Berkies. He told Berkie officials that his body just wouldn't allow him to complete that 20th race. In appreciation for the enthusiasm he has brought to the sport of cross-country skiing, officials sent him the 20-year commemorative bib anyway.

There have also been times, not that long ago, that Ed, thirsting for more competition, asked to be placed in a younger wave bracket at the Berkie. Up to recently, the last competitive age group category has been 80 years and over. In honor of Ed's contribution to the sport, they now have an 85 year old category.

Ed and Dots volunteer at the chalet at Swedetown Trails every Thursday afternoon, serving skiers items like coffee, hot chocolate, and U.P. pasties. They have been the poster couple for the local 'Ski for Hearts' fundraiser. When visiting the chalet, be sure to look up on the wall at Ed's 20-year commemorative Berkie bib, a tribute to a man who, in his way, has made the art of putting on skis a little easier for all of us. You'll also see at least one of his state-of-the-art collapsible wooden waxing stations in the complex. Ed is still in full stride, making them for anyone who needs one. Ed is also an accomplished mason, electrician, fisherman, and still makes his own firewood.

Ed, the oldest skier at Swedetown Trails, would like to compete in the shorter version of the track's Great Bear Chase, this March. The race is 26 kilometers in length. He'll be careful of the mass of skis and poles at the start. He'll pace himself so he doesn't tire early. He'll sense the old mining shafts and other remnants of a past Upper Michigan mining era as he skis with the enthusiasm of a child. Then he'll hear his name called and see people clapping at the finish. The giant digital clock will tell him that he is well within the reach of his goal. Then, with one last push of his poles, he'll cross the finish line, thrilled that he can still challenge himself at the age of 90. The public address announcer might even say something like, "Now finishing is Ed Harjala, a work in progress, The Old Man and the Ski."

My life was just beginning when Ed was overseas during World War II. I never even met him until he was in his late 70s. We have known each other on a limited basis since then. I think of him every time I wax my skis on the ski station he made me. I think of how he taught me to give life its best shot and enjoy every minute of it.

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