



Editor, Patsy Whitehead, CCC

Nolin RECC line technician Anthony Huff, 3 years of service.

News you can use

A better life

Four resolution ideas for a safe and efficient year

New Year’s resolutions are easy to make and hard to keep. We make those resolutions because we believe we can improve. I always take it as a hopeful sign. And in my experience, every now and then we’re able to actually follow through on one of those resolutions.

So in that spirit of optimism for a new start, here are four ideas for energy resolutions in 2015 and beyond!

1 Use space heaters safely and wisely. Space heaters are a very inefficient form of heat, especially compared to a heat pump. But they can be handy for a quick warming of a small area. They can also pose safety hazards if not used correctly: read and follow the directions, keep them away from flammable materials, where children and pets might touch them, and make sure the cord is in good shape.

2 Follow the rules for standby generators. Every year people die from misusing portable generators during power outages. Follow the instructions exactly. Keep them away from the house and even a garage where fumes can cause a hazard. There should be nothing plugged into the generator when you turn it on.

3 Make a storm kit. Winter weather can come without much warning. Be prepared for the cold and power outages. Gather what you would need for

an extended time without electricity: a flashlight and extra batteries, a battery radio, first aid kit, medications, water.

4 Save money by saving energy. If you’re like most Kentuckians, you can take some simple steps that will help you use electricity more efficiently in a way that will make a difference on your bill. Sealing leaks around windows and lowering the temperature setting on your water heater are just two of many ideas. Call Nolin for more ways to save energy dollars or visit our Web site at www.nolinrecc.com. You can also find a lot of tips in *Kentucky Living’s* annual energy guide—at KentuckyLiving.com click on the “Energy Guide” link.



Mickey Miller
President & CEO

New Year’s resolutions may be hard to keep, but sticking to a plan to reduce your energy consumption will pay you returns throughout the year – year after year!

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SPIKE MAFFORD/PHOTODISC/THINKSTOCK

Home heating: Calculating the be

According to the U.S. Department of Energy, heating and cooling account for nearly half of the energy use in a typical U.S. home, making it the largest energy expense for most households. While few people enjoy spending money on home heating fuels, consumers are willing to pay for comfort in the form of heat.

In these colder months when the temperatures dip and the need to heat your home rises, it makes sense when trying to determine the most economical heating method to evaluate the cost per unit of heat. This is referred to as a British thermal unit (Btu).

Evaluating cost per unit of heat for propane and electricity

The Btu content per gallon of propane is 91,500 Btu. The Btu content for electricity is 3,413 Btu per kilowatt-hour (kWh). It takes 26.8 kWh to equal the Btu content of one gallon of propane.

Using the U.S. Energy Information Administration's table on residential propane and electricity rates for November 2014, \$2.40 per gallon, excluding taxes, and 13.01* cents per kWh, we arrive at the following calculation: **26.8 kWh x 13.01¢ = \$3.49**

If we used only Btu content to determine the best energy source for home heating, it would appear that propane is less costly than

electricity if the price for propane is below \$3.49 per gallon.

Comparing usable heat costs

While we may have determined the cost of the actual heat content, what matters even more is the cost of the usable heat (warmth). A low-efficiency propane furnace may have an efficiency rating of 80 percent, and a high-efficiency propane furnace may have an efficiency rating of 95 percent. Let's assume we have a 90 percent efficient propane furnace. That means 10 percent of the Btu are not converted to useable heat (warmth). Here is the math:

$$91,500 \text{ Btu} - 10\% \text{ Btu loss} = 82,350 \text{ Btu}$$

So now it only requires 24 kWh to equal the delivered Btu content of propane.

$$24 \text{ kWh} \times 13.01\text{¢} = \$3.12$$

Electric heat is 100 percent efficient

What may surprise most consumers is that the least efficient electric heating system delivers 100 percent efficient heat. Yes, electric resistance heat (i.e., space heaters, baseboard heating) is 100 percent energy efficient. Every single Btu in a kilowatt-hour is delivered as usable heat. So if you are paying more than \$3.12 per gallon of propane for a 90 percent efficient propane furnace, it would be cheaper to use electric resistance heat.

Are we recommending that you use electric resistance heat as your sole heating source? No. While we are proud to offer a reliable source of electricity, we don't want to empty your wallet. However, if your only choice is electric resistance heat, we are happy to share saving tips on our Web site at www.nolinrecc.com.

Pumping up efficiency

There are even more efficient electric heating systems called heat pumps. An air-source heat pump is at least 250 percent energy efficient. How is it so efficient?

In the heating mode, heat pumps do not use electric energy to create heat; they use it to pump heat into your home through a reversal of the refrigeration process. If you have central air conditioning, you have already experienced this process in reverse when your unit pumps heat out of your home in the summer. If you have ever stood next to the outdoor components you know the air-conditioning system is exhausting very hot air. In winter, it simply does the opposite, moving heat into your home. Air source heat pumps are equipped with some type of auxiliary heat for those times when temperatures are near freezing or dip below. The typical back-up is in the form of electric resistance heat strips, but there is also a dual fuel propane option.

IN COMPARISON TO OIL OR GAS FURNACES, ELECTRIC HEATING HAS MANY ADVANTAGES

Electric resistance heat

(i.e., energy-efficient space heaters, baseboard heating):



...is 100% efficient – every single Btu in a kilowatt-hour is delivered as usable heat.



...is quick to respond and can be very quiet.



...takes up less space in the house than other conventional systems (assuming space heaters are used).



...can warm select rooms, allowing you to keep your main thermostat down while ensuring continued comfort.

Electric heating systems are:



...generally less expensive to purchase and install.



...safe because there is no combustion process. There is no chance of flames starting a fire or having combustion products contaminate the air.



America's Electric Cooperatives

Benefits of electricity vs. propane

In calculating the Btu per kilowatt-hour for a heat pump we use this formula: $3413 \text{ Btu} \times 250\% = 8532 \text{ Btu}$.

This means that it only takes 9.65 kilowatts using an air source heat pump to deliver the same amount of warmth as a 90 percent efficient propane furnace.

$9.65 \text{ kWh} \times 13.01 = \1.25

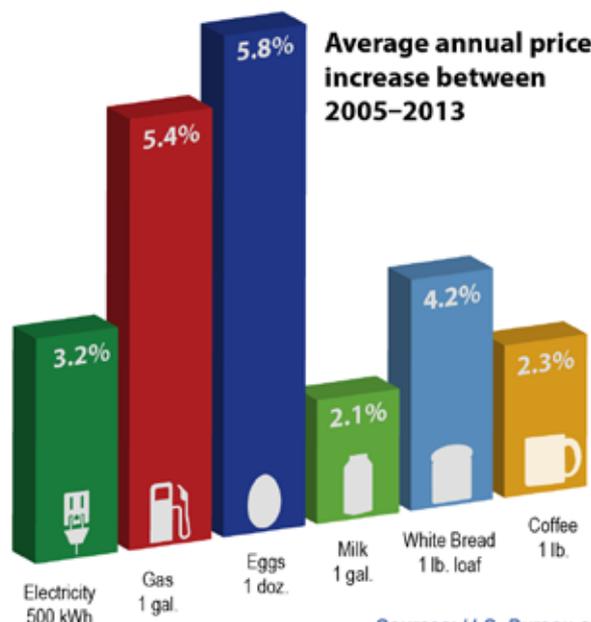
The price of propane would need to drop to \$1.25 per gallon to break even with the cost of home heating using an air source heat pump. Efficiency increases even more sharply when looking at the 350+ percent efficiencies of a geothermal (water source) heat pump. An additional advantage of geothermal systems is that they can be equipped to provide free water heating most of the year.

At Nolin, we believe it is our responsibility to provide members with reliable energy facts regardless of fuel type so you can get the most from your energy dollars. We are committed to helping you find the best energy solution for your budget and lifestyle and hope you will consult with Nolin's energy advisors before making any big home-heating decisions.

**Nolin RECC electric rates are lower than the national average.*

Electricity Remains a Good Value

Electricity continues to be a bargain, especially when compared to other consumer goods. As demand for energy rises and fuel prices increase, your electric cooperative is committed to providing safe, reliable electricity and keeping your electric bill affordable.



Sources: U.S. Bureau of Labor Statistics, Mainstream Graphics

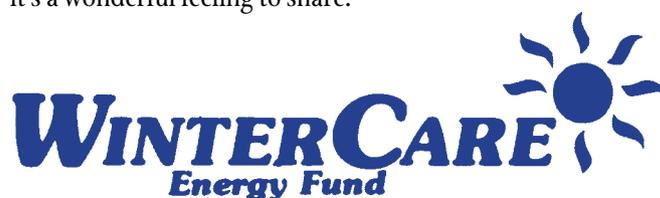


HELP

This winter, thousands of people all over Kentucky will suffer from the cold, because they simply can't afford to heat their homes. Help! Add \$1.00, \$5.00, or more for WinterCare to your electric bill payment.

Every penny of your contribution will go toward keeping people warm.

Being cold is a terrible thing. Open your hands and your heart to warm others: it's a wonderful feeling to share.



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2015 ENERGY EFFICIENCY PROGRAMS

Nolin RECC rewards members when they make smart decisions. For years, Nolin has been offering incentives to encourage members to improve the energy efficiency in their homes.

Here are your Rebate Programs

Touchstone Energy New Home Program — \$750 Rebate

When a heat pump is installed in a new Touchstone Energy Home the member will receive a rebate as long as the following requirements are met.

- Must be built to Touchstone Energy Home standards
- Pre-drywall inspection required
- Minimum **14 SEER and 8.2 HSPF** heat pump
rebate does not include manufactured homes, modular homes, or mobile homes.

Heat Pump Retro-fit Program

When a high-efficiency heat pump is installed in an existing home, meeting the requirements below, the member will be eligible for a rebate.

- Must convert from electric furnace, ceiling cable heat, or baseboard heat to a heat pump
 - Must be an all-electric home
- | | |
|--|----------------|
| 13 SEER / 7.7HSPF | \$500 |
| 14 SEER / 8.2 HSPF | \$750 |
| 15 SEER / 8.5 HSPF or greater | \$1,000 |

Residential Energy Audit Program

Nolin RECC offers residential audits for members. The cooperative provides a free inspection of the premises and makes recommendations to the homeowner on what areas need to be addressed in order to make their home more energy efficient. Members may also receive caulking from Nolin RECC to help seal air leaks.

Button-Up Program

After having a free energy audit performed by Nolin RECC, members may receive up to a \$1,370 rebate after insulating and weatherizing their home according to our recommendations. Nolin will rebate members based on the calculated Btu of heat loss reduced from the previous inspection performed by the cooperative. The rebate will be applied according to the following requirements.

- A FREE home energy audit must be completed before and after upgrades
- Upgrading insulation, windows, or doors on all-electric home at least two years old
- A Nolin RECC representative will calculate Btu saved

Rebate to be issued based on the following levels:

Level 1	\$520	Up to 13,000 Btu saved at \$40 per thousand Btu
Level 2	\$1,060	26,500 Btu or greater *
Level 3	\$1,370	34,250 Btu or greater *

*Level 2 and 3 **require** a blower door test before and after work is done

Please call Todd Drake at (270) 765-6153 or e-mail tdrake@nolinrecc.com for more information on any of these programs.



Scholarships Increase in Value and Size

A Memorial Scholarship to Honor Bob Wade Sr.

We have some exciting news for Nolin RECC members who have children graduating from high school in 2015! Your cooperative is offering a \$5,000 college scholarship this year in memory of former Nolin RECC director Bob Wade Sr., who passed away in January 2014.

Mr. Wade served on the Nolin RECC board from 1970 to 2004 (nearly 30 of those years were spent as board chair). Bob Wade appreciated the value of education – one of his many community accomplishments was serving on the North Central Kentucky Education Foundation.

Nolin is a strong and successful cooperative largely because of the importance we place on educating our members and the community. We realize Mr. Wade had a tremendous impact on developing our strategies and educational programs and in his memory, Nolin is offering a \$5,000 scholarship to an upcoming high school graduate living in our service area.



Those interested in applying for a Nolin RECC scholarship can access the application online at www.nolinrecc.com or call the office at (270) 765-6153 ext. 3310. Application deadline is March 31, 2015.

In addition to the Bob Wade Sr. Memorial Scholarship, Nolin is increasing each of our seven existing scholarships to \$1,500. Six of the seven scholarships are awarded to graduating seniors whose parents or guardians are members of the co-op and live in the Nolin RECC service area.

We also present a continuing education scholarship to a Nolin RECC member returning to school after being away from the classroom for a few years. Sometimes we get busy with life and plans to go to college get put on hold. The purpose of the continuing education scholarship is to help our members with the financial burden of returning to school.

Education has always been important to Nolin and we encourage members to take advantage of the cooperative difference by applying for college scholarships. You never know...the next recipient just might be you or your child!

STATEMENT OF NONDISCRIMINATION

Nolin RECC is an equal opportunity provider and employer. Nolin prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, sex, mental/physical disability, and where applicable, sexual orientation, marital status, familial status, parental status, religion, genetic information, political beliefs, reprisal, past or present military status, or because all or part of an individual's income is derived from any public assistance program.

Contact the Equal Employment Opportunity Commission promptly when discrimination is suspected at (800) 669-4000 (toll free) or (800) 669-6820 (toll free TTY number for individuals with hearing impairments), or at www.EEOC.gov.

GET GREEN WINNERS

Co-op Month Contest winners announced

After allowing Nolin RECC members three months to register for one of 20 \$100 electric bill credits, we have our winners!

Last September, Nolin announced the “Get Green” contest as our way of celebrating National Co-op Month. Although the event is celebrated during October, we wanted to give members plenty of time to enter the contest, so registration was open from September through November 30. Entry forms appeared in the *Nolin News*, Nolin’s bill insert, and were accessible through the Nolin RECC Web site at www.nolinrecc.com. The contest was open to ALL Nolin members!

Nearly 1,000 Nolin members were registered when the 20 winners were randomly selected through an electronic numbering system. One of the lucky 20 will receive home energy upgrades costing up to \$2,000. We’ll keep you posted on which one qualifies for the energy efficiency improvements.



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Congratulations to Nolin’s Get Green Winners: \$100 electric bill credit

*Heather Bewley
Teresa Eastridge
Michael Gartin
Darrell Johnson
Earl Johnston
Danny Knight
Tony Kuhlman*

*Fred Martin
Kimberly Mansfield
Ramona Osborne-Gill
Robert Peterson
Carl Pitts
Milton Reeves
James Shepherd*

*Cynthia Shults
Barbara Stiles
Manson Taulbee
Donna Taylor
Lynn Ann Waddle
Kay Wright*

Each member received a \$100 credit on their December 2014 Nolin RECC electric bill! Watch your *Nolin News* to find out which of these winners will be awarded the home energy upgrades!



Install carbon monoxide detectors

Power lines are KILLERS

Winter weather and car accidents account for the majority of downed power lines, according to the Electrical Safety Foundation International.

Always assume that any downed line you see is an energized power line and report it immediately to the police, fire department, and Nolin RECC.

If you discover a low or downed line, make sure you do the following:

- Move away from the line and anything touching it.
- If you see someone who is in direct or indirect contact with the line, do not touch the person. You could become the next victim. Call 911 instead.
- Do not attempt to move a line or anything in contact with it by using an object such as a broom or stick. Even nonconductive materials like wood can conduct electricity if slightly wet.
- Be careful not to put your feet near water where a downed power line is located.
- If you are in a vehicle that has contact with a line, stay inside. Use your cell phone to call for help. Honk your horn to keep others away.
- Do not drive over downed power lines.

Operating large farm equipment near overhead lines poses another hazard. Everyone working on a farm should be aware of power lines and keep farm equipment away from the lines. Take special note of larger, modern equipment such as tractors with high antennas.

Start your year out on a safe note: install carbon monoxide detectors in your home. If you heat your home with a gas or fuel oil furnace, have a gas fireplace, burn wood in a stove or fireplace, cook with a gas range/oven, or have an attached garage, you need carbon monoxide detectors. You can't see or smell carbon monoxide, which is a potential byproduct of burning fossil fuels.

You should have at least one carbon monoxide detector to alert you of the presence of gas. The detector should be installed according to the manufacturer's instructions, on the same floor as the bedrooms so it can alert your family to wake up in case the gas reaches an unhealthy level. Better yet, install a detector on every floor of the house.

The symptoms of mild carbon monoxide poisoning may be nonspecific and similar to those of viral cold and flu infections or food poisoning: headache, nausea, abdominal pain, dizziness, sore throat, and dry cough.

But unlike flu infection, carbon monoxide poisoning doesn't cause a high temperature.

In children, the symptoms are similar to those of an upset stomach, with nausea and vomiting.

You can also prevent serious consequences by learning to spot the warning signs. Carbon monoxide poisoning may be a possibility if:

- Other people in the home or workplace suffer similar symptoms
- Symptoms tend to disappear when you go away (for example, on holiday)
- Symptoms tend to be seasonal (for example, headaches during the winter when indoor heating is used more often)

Make sure batteries are replaced twice a year in your detectors.

If you see the signs or if the detector alarms, leave the home and call your local fire department and gas company to inspect the home and equipment.

Do not let your car idle in a garage that is attached to the home.



IMPORTANT TELEPHONE NUMBER CHANGE

Nolin is consolidating our office telephone numbers in an effort to be more cost efficient. Members will not have to store numerous telephone numbers for the co-op, instead you may dial either of these two numbers to reach Nolin RECC at any time:

Office number: 270-765-6153
Toll-free number: 1-888-637-4247

Keep these numbers handy for business or emergency calls

We've Got Your \$25 Number! \$25 **WIN \$25 Worth of FREE Electricity**

Nolin News features a contest called "We've Got Your Number." Hidden inside this issue are 2 randomly selected member account numbers. If you spot your account number, contact the Member Services Department at (270) 765-6153, and **win a \$25 CREDIT on your electric bill.** You must identify your number and call by the 15th day of the month's issue containing your number. Account numbers could be anywhere in your *Nolin News*!

New Member Credits

All members signing up for new service with Nolin receive a short survey. Members who return the completed survey to Nolin are automatically eligible to win a \$30 credit on their electric bill. Each month, one name is drawn and a lucky Nolin member receives a bill credit on their next statement. Congratulations to our latest winner, **Deborah Askins, of Hodgenville.**

Online payments

Access your Nolin RECC account through our Web site at **www.nolinrecc.com**. Click on "YourAccount" to check your consumption history and make payments by debit card, Visa, or MasterCard. To apply for budget billing and automatic draft online, click on "Residential Bill Payment."



HOW TO REACH NOLIN RECC

ELIZABETHTOWN OFFICE

411 Ring Road, Elizabethtown, KY 42701-6767
8:00 a.m.-5:00 p.m., Mon-Fri • (270) 765-6153

RADCLIFF OFFICE

101 West Lincoln Trail Blvd., Radcliff, KY 40160
8:00 a.m.-5:00 p.m., Mon-Fri • (270) 351-2199

(Office closed from 12:30-1:30 daily)

TOLL-FREE BUSINESS CALLS — 1-888-637-4247

PAY DIRECT BY PHONE TOLL FREE — 1-855-356-6359

EMERGENCY PHONE NUMBER — (270) 769-6396

EMERGENCY TOLL-FREE CALLS — 1-800-572-1147

Web site: www.nolinrecc.com
e-mail: comments@nolinrecc.com

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