JANUARY 2010



real people, real power. Tideland Topics

A NEWSLETTER FOR THE MEMBER-OWNERS OF TIDELAND ELECTRIC MEMBERSHIP CORPORATION

RIGHT SWITCH: Over 30,000 CFLs being mailed to members

This month, Tideland EMC residential members will receive two compact fluorescent bulbs (CFLs) in the mail.

Touchstone Energy Cooperatives

These bulbs are being sent to further Tideland's compliance with the Renewable Energy Portfolio Standards (REPS) legislation enacted by the NC General Assembly in 2007. Under the law, electric cooperatives are required to meet up to 10% of their energy needs through renewable energy resources or energy efficiency measures. Tideland may comply with the REPS requirement in a number of ways, which include distributing energy saving CFLs.

Residential members currently pay 35¢ per month to cover the cost of the cooperative's compliance efforts.

Tideland members who receive their electric bill at an out of state address are not included in this mailing because the kilowatt hour reductions must occur in North Carolina to receive credit from the state's utility commission.

If a bulb arrives damaged, bring it to any Tideland EMC office by February 12 for a free replacement.

For more information see the insert included in your CFL

mailer, which doubles as a savings bank!

1.5 MILLION KWH:

Together We Save

If every Tideland member replaces two incandescent bulbs with the CFLs being shipped this month,

we will reduce energy use by 1.5 million kilowatt hours in 2010.

Here are some tips to get the maximum life out of your CFL:

Be gentle. CFLs aren't just breakable glass "bulbs," but also sophisticated electronic devices. A drop or bang on the way home from the store might have an

CONTINUED ON PAGE B

Tidelon

DO THE TWIST FROM PAGE A

undetectable effect on its likely life.

Don't screw a CFL in by holding the

glass spiral. Use the ballast (the plastic base part) at least for the final twist. The connection between the glass spiral and the plastic ballast could be weakened in a way you won't see, but the effect can be a shorter life for that CFL.



Message to our Member-Owners: Looking to 2010 and beyond

by Cecil O. Smith, Jr. • CEO & General Manager

The CFL mailer most of you will receive this month also includes a list of energy-saving New Year's resolutions. Tideland EMC has some resolutions of its own.

Some of our resolutions are entirely new, based on exciting technological developments that are only now within our reach. Others are a continuation of resolutions committed to nearly 75 years ago when the first Tideland service was energized.

In 2010 and beyond we resolve to:

 Implement cost-effective, consumer friendly technologies that enhance service and meet ever increasing member expectations. This will be most immediately addressed through the installation of state of the art automated metering equipment. (see pages F & G of Tideland T opics for details)

- 2. Continue to empower our members by offering a robust menu of energy saving tools. Be it energy-saving information, products or services. Tideland will continue to bring you sensible energy solutions that can reduce your monthly electric bill. We will also actively seek to partner with agencies and organizations that can help alleviate high energy consumption for our low income members.
- Improve our online presence and internet based service options with the development of a new website. Soon we will launch a much improved website that will allow you to sign up for E-bill notifica-

tion. You will also be able to access a digital version of Carolina Country magazine that will include four bonus pages of content monthly. And when automated metering installation is complete systemwide, you'll be able to access daily power use data online from anywhere in the world.

4. Continue to implement cost-cutting measures that do not sacrifice service or safety. We know that our members are having to tighten their belts and the co-op has a responsibility to do the same. Therefore, we are reviewing all of our operations to seek economies of scale, cost sharing opportunities and eliminate waste and redundancy.

Give it your best shot

Tideland EMC will provide an all-expenses-paid scholarship for one girl to attend the Kellie Harper N.C. State Basketball Camp in Raleigh

and one boy to attend the Roy Williams Basketball Camp in Chapel Hill this summer. The camps will work closely with attendees to develop fundamental skills to help each excel on and off the court.



Rising sixth through eighth graders are eligible to apply and Tideland EMC will begin accepting applications on January 4, 2010. The deadline to apply is March 31, 2010. Applicants will be judged on academics, extra-curricular activities and written essay.

> Applications have been mailed to all middle school coaches in Tideland's six-county service territory. Students can also download an application at www.ncelectriccooperatives.com.

For more information call Heidi Smith at Tideland EMC at 252.944.2410.

Co-op awards \$14,233 DEAS to outstanding educators

TEACHERS INTERESTED IN APPLYING FOR THE NEXT ROUND OF BRIGHT IDEAS FUNDING MAY VISIT OUR WEBSITE WWW.NCBRIGHTIDEAS.COM FOR MORE INFORMATION. HERE ARE OUR MOST RECENT WINNERS. CONGRATULATIONS!

Mary Kay Bradshaw, Dennis Soule and Barbara Applewhite Washington County Union School "Geocaching: Get Lost in the Fun!" Handheld GPS systems, compasses, and digital video cameras will be used to set coordinates and record the problem-solving process as teams search for locations and solve Linda Boyd Pungo Christian Academy "Elementary Elements of Art" Students will create unique artwork using watercolors, acrylics, clay and styrofoam

Gwendolyn Lee-Tyson Beaufort County Ed Tech "Robotic Skills in the 21st Century" Students will explore the world of Robotics using the Lego Mindstorm tool set to build and program their own racing robots.

Kathy Brinn Northeast Elementary "Art: Business and Pleasure" Students will scan their original artwork into



Alida Sawyer, Jane Mizelle and Amanda Van Staalduinen John Cotton Tayloe Elementary

"Learning Grows!"

hidden problems.

Exceptional needs students will work in cooperative groups to beautify the school campus. Students will improve reading, math, writing, science and social skills as they study and maintain seeds, flowers and trees.

Sherrie Swain and Charles Daniels John Small Elementary "Wonderful Weather Station"

Washington High School construction technology students will build two weather monitoring stations for use by John Small's fourth and fifth grade students. the computer, edit it and then print it on note cards.

Penny Miller Chocowinity Primary School "The Show Must Go On"

Puppets purchased with the grant will allow students opportunities to make up their own plays and perform stories and rhymes that they are familiar with.

Tommie Thomas Chocowinity Middle School "Planting Seeds of Community and Understanding" Using the novella "Seedfolks" as the basis CONTINUED ON PAGE D 1. Windows

PLACES TO

AIR LEAKS



3. Fireplace dampers

4. Exterior wall outlets

5. Plumbing & wire penetrations

O. Clothes dryer vent

7. Recessed lighting

8. Attic access hatch or door

9. Duct work and boot connections

> 10. Exhaust fans

Bright Ideas Grants

CONTINUED FROM PAGE C

for this project, students will plant seeds for a school wildflower garden and a small urban garden for the classroom. Students will work together to build a sense of community and learn about the themes in the book.

Crystal Swindell Pungo Christian Academy "Charged Up for Science"

Whether it is charges that run the human body, hold together atoms, run electrical circuits, or create friction, science is fully charged. Students will use a Van de Graaff generator and conductivity tester to explore the concept of charges.

Deb Van Staalduinen Terra Ceia Christian School "Come Alive with Magical Reading!"

Funds will be used to purchase a "Sunny Day Learning Carpet" for hands on student activity.

Ginny Vogt, Lizzann Taylor, Janie Hardison, Amy Eisenhard, Pat Sullivan and Bay Rhodes Arapahoe Charter School "Classroom Jeopardy: We're All Winners!"

Teachers will purchase a classroom Jeopardy set, based on the long running game show. Games can be created and edited by the teachers to specifically target classroom curriculum, especially those areas where students need extra practice. Using remote control devices and team scoreboards, students in third, fourth and fifth grades will eventually compete in a spring educational tournament.

John Cox, Sheena Sutton and Kathy Anderson Mattamuskeet High School

"Calculus Winners" This is the first year the school has offered AP Calculus on campus. The grant will be used to purchase TI89 graphing calculators.

Emily Harper Arapahoe Charter School

"Fables, Fairy Tales and Fluency"

MP3 players will be used to create an audio library using the free resource, Lit 2 Go. Students will be able to read along while texts are being read aloud, increasing both comprehension and fluency.

Linda Howard Washington High School

"May I Help You, Please?"

This project will provide students with a hands-on virtual business venture. The students will gain skills needed to succeed in business to include the concepts of pricing, purchasing, staffing, promotion, financing, market research, targeted marketing, merchandising, security, risks and surprises, location selection, supply and demand, competition, business plan, and financial statements.

Sharon Paszt Jankowski Washington High School "What Will That Crazy Science Teacher Do Today?"

This grant will provide enough equipment and supplies to allow one for unique experiment or demonstration in science lab every day.



*Electric bill financing details: No down payment required 5% interest for 12 months Co-op membership must be at least 1 year old with no history of disconnects for non-payment of your utility bill

Call 1.800.637.1079 for details

Your Window of Opportunity

Windows provide our homes with light, warmth, and ventilation. But when winter sets in they can have a downside.

Insulating with draperies is a lowcost quick fix to drafty windows and can reduce heat loss from a room up to 10 percent. And they're just as helpful in hot summer months by blocking sunlight. White plastic-backed drapes can reduce heat gain by up to 33 percent.

Interior storm window panels are another low-cost fix (available at most hardware stores), and consist of flexible or rigid plastic installed over or adhered to existIf you're building a new house or replacing windows, be sure to choose energy-efficient models that will shave heating, cooling, and lighting costs year round.

Energy Star® has established a set of energy performance ratings, tailored to each U.S. climate zone, to guide you in selecting windows. These performance ratings are broken into several categories, although the two most basic are U-Factor and Solar Heat Gain Coefficient (SHGC), which can be found on window stickers or packaging.



ing window panes. Installation is fairly simple, and panels are either taped on or mounted with Velcro, magnetic strips, or snapin seals. Put them up in autumn and remove them in spring to reduce winter heat loss by up to 50 percent. In simple terms, U-Factor measures how easily heat can flow through a window, not counting direct sunlight. The lower the number, the more energy efficient the window.

SHGC measures how much heat from sunlight can be absorbed

UPCOMING RIGHT OF WAY MAINTENANCE ACTIVITIES

Tideland EMC has contracted with Lewis Tree Service to trim trees in our utility right of way in the following areas during January:



Starting at the Silverhill substation and along the Arapahoe circuit

Includes: Scott Store Rd. Scott Town Rd. South Neuse Rd. Goose Creek Rd. S. Goose Creek Rd. Kennels Beach Rd. Roberts Rd. Seafarer Rd. and all small roads and lanes off these roads.

by the window. A high number means the window remains effective at collecting heat during winter. A low number provides greater shading ability and may be best for Southern climates.

Here in Tideland's service territory, windows in Beaufort, Washington, Dare and Hyde counties should be rated for climate zone North-Central. In Pamlico and Craven counties, South-Central zone windows are preferred. Visit www.energystar.gov for more details on climate zones and other shopping criteria.

Out with the old. Out of the old.

In with the FUTURE.



TIDELAND IS ROLLING OUT SMART GRID.

By 2012, Tideland EMC will replace all 22,607 of its meters with TWACS electronic meters. TWACS stands for Two-Way Automatic Communications System. TWACS technology will automatically read your meter and transfer the information to Tideland's billing department. But that's just the beginning...

Cost savings for the co-op & you

Because we will no longer have to obtain meter readings in person, labor and transportation expenses are significantly reduced. We will also reduce our liability exposure by remaining off member owned property to the greatest extent possible.

Revenue protection

The co-op will automatically be alerted to attempts to tamper with the meter.

Greater billing accuracy

Misreads and estimated billings are eliminated as are meter reading delays due to inclement weather.

Improved electric system reliability

By integrating TWACS capabilities with our outage reporting system, we will be able to diagnose and pinpoint problems more quickly. That translates into faster power restoration. Furthermore, these advanced systems will allow us to predict service problems so our crews can work to prevent outages.



Source: National Rural Electric Cooperative Association

FAQs

Q. Why is Tideland using TWACS?

A. The TWACS automated meter reading system will offer immediate benefits by providing more reliable information. It will also offer long-term benefits for our members by providing access to much more detailed energy usage information.

Q: How does TWACS work?

A: The TWACS system will communicate from Tideland's office through a computer network to our substation sites. From the substation, information is transferred to and from the meter through the power lines then back to the office.

Q: Will TWACS affect my bill?

A: TWACS will provide more accurate readings and will eliminate misreads and estimated readings.

Q: How will meter readings be collected?

A: We will send an electronic request to our subfor meter reading information. The substation equipment will then communicate over our power lines with the individual meters, collect the data and relay the response back to Tideland office personnel.

station equipment

Q: Will all meters be upgraded at once?

A: No. Tideland plans to upgrade meters and implement the TWACS automatic meter reading system over a 24 to 36 month period. A door hanger will be left at each location when the meter changeout is complete.

Q: Why do I need a new meter?

A: The TWACS system requires meters with special two way communication modules. It is not practical to retrofit existing meters.

Q: Will TWACS affect any appliances or technology in my home?

A: This system will not interfere with the operation of any home electrical appliances or devices.

The next chapter in Tideland's history

Meter technican Herb Cardwell installed the first Tideland TWACS meter on December 1, 2009.

AUTOMATION

RELIABILITY

FLEXIBILITY

Real People. Real Power.

CAROLINA COUNTRY • TIDELAND TOPICS • JANUARY 2010 • PAGE G

CFLs, Mercury & Safe Handling

Mercury is an essential ingredient for most energy efficient lighting products, including CFLs. It is the mercury that excites phosphors in a CFL, causing them to glow and give light.

How much mercury does one CFL bulb contain?

Fifty milligrams, roughly the equivalent of the tip of a ballpoint pen. By comparison, older home thermometers contain 500 milligrams of mercury. Older residential thermostats contain up to 6,000 milligrams. Amalgam dental fillings contain 500 milligrams. It would take between 100 and 665 CFLs to equal those amounts.

Should I be concerned about using CFLs in my home?

CFLs are safe to use in your home. No mercury is released when the bulbs are in use and they pose no danger to you or your family when used properly.

Since CFLs contain mercury, how can they still be good for the environment?

CFLs are ultimately responsible for less mercury than standard incandescent light bulbs. The primary source of mercury in our air comes from burning coal, the most common fuel used to produce electricity. A CFL uses 75% less energy than an incandescent light bulb and lasts up to 13 times longer. Power plants will emit 10 mg of mercury to produce the electricity to run an incandescent bulb compared to only 2.4 mg of mercury to run a CFL for the same time.

How do I safely dispose of a CFL when it burns out?

It is best to recycle your CFL at any Tideland EMC office. Members can simply bring in any expired, unbroken CFL bulbs and the co-op will ship it to a mercury recycling facility.

What should I do if I break a CFL?

If a CFL breaks, carefully sweep up all the fragments, wipe the area with a wet towel, and dispose of all fragments, including the used towel, in a sealed plastic bag. Follow all disposal instructions. If possible, open windows to allow the room to ventilate. Do NOT use a vacuum. Place all fragments in a sealed plastic bag and place in the trash.

REAL PEOPLE. REAL POWER. Tideland Topics

www.tidelandemc.com

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HOLIDAY OFFICE CLOSING: FRIDAY • JANUARY 1, 2010 OUR 24-HOUR CALL CENTER WILL REMAIN OPEN

Cash for the Class of 2010

Tideland EMC is accepting college scholarship applications from all high school seniors in Beaufort, Hyde, Washington, Pamlico, Dare and Craven counties. The co-op will award eight \$1,000 scholarships.

Applications are scored using the following criteria:

Scholastic Achievement 50%, Financial Need 25% and Extracurricular Activities 25%. In addition to the application, scholarship candidates must include:

- a letter detailing their reasons for applying for the scholarship and their future plans;
- 2. a letter of recommendation from their principal, guidance counselor or academic advisor;
- 3. a complete transcript of high school courses and grades; and
- 4. SAT or ACT scores if applicable.

Students have until Friday, March 5, 2010 to apply. Please see your school's guidance counselor for a copy of the Tideland scholarship application or visit our website: www.tidelandemc.com. For more information call Heidi Smith at 252.944.2410.