

# GCEA News



**INSIDE ...**

- \* Don't Become A Statistic
- \* Celebrate St. Patrick's Day
- \* Cooking With Solar Ovens
- \* USDA Check Presentation
- \* Power Blinks

**MAILING ADDRESS**

P.O. Box 180  
Gunnison, CO 81230-0180

**STREET ADDRESS**

37250 West Highway 50  
Gunnison, CO 81230

970-641-3520 Gunnison  
970-349-5385 Crested Butte

gcea@gcea.coop **Email**  
www.gcea.coop **Web**

**BOARD OF DIRECTORS**

Paul Hudgeons, president  
District 5 (Lake City)

George Besse, vice president  
District 4 (Gunnison West/Powderhorn)

Helen K. Allen, secretary/treasurer  
District 3 (Ohio Creek/Almont)

Bill LaDuke, assistant secretary/treasurer  
District 1 (Crested Butte)

Chris Morgan, director  
District 2 (Mt. Crested Butte)

John Vader, director  
District 6 (Gunnison East/Sargents)

Lou Costello, director  
District 7 (at large)

**NEWSLETTER EDITOR**

Vicki Spencer



Touchstone Energy®

## GCEA is Improving the System

BY MICHAEL V. WELLS, CHIEF EXECUTIVE OFFICER

**M**aintaining the infrastructure for delivering your electricity is an ongoing process for Gunnison County Electric Association. Over the years, GCEA has implemented many construction projects throughout the system. For example, during the past few years GCEA added and replaced a substantial amount of plant in Arrowhead, Mount Crested Butte and Ohio Creek. These additions and replacements are paying back in increased reliability. As of year end 2009, the co-op recorded a grand total of only 1.47 average hours of interruption for member loads. This is well below GCEA five-year average, and, in fact, it is the lowest number of interruption hours that has been recorded in recent history.



Mike Wells

Currently, the growth in new consumers is only a fraction of what it was a few of years ago; however, the slowdown in requests for new services will allow GCEA to concentrate on other system improvements. As we look ahead to the 2010 and 2011 construction seasons, we find a number of projects in queue.

One of the first projects we are planning is to rebuild much of the overhead system in the town of Crested Butte — the oldest part of our system. Another project is to continue the rebuild of the line from Highway 114 at Cochetopa Pass to Parlin. This will convert our current two-phase system to a full three-phase line and allow us to divide the load going to Sargents and Pitkin better. It will also allow us to replace an extremely old pole line. A third project is to install a new feeder in the Lake City area to replace a troublesome underground circuit.

Along with the replacement of aging lines and equipment, we will continue

implementing an aggressive line inspection and maintenance program. Each year, all overhead lines are inspected by foot patrol and visual inspection. We also have a “sound and bore” program that tests 10 percent of all our poles annually for below ground line

rot. On the average, we have found approximately 20 to 25 poles each year that no longer meet strength requirements due to rot. These poles are then changed out in order of priority. Finally, we inspect underground pad-mounted equipment and sectionalizing cabinets. We follow a systematic process for inspecting, repairing and repainting this equipment as necessary.

This spring, we will start construction on a new second-story addition to the Gunnison headquarters and remodel of the original 1975 Porter-Allen building. At the time this building was constructed and the headquarters was moved from Crested Butte to Gunnison, we had 2,400 meters, 551 miles of line and only 16 employees. Today we have 10,250 meters, 1,052 miles of line, with half the line underground, and 42 employees. Although we expanded the building 12 years ago to add additional offices, this space is completely occupied. Needless to say, we are overcrowded and need more office space.

We have done what we can to maximize the use of the current space, but it is time to bite the bullet and move forward with the expansion project. In some respects the timing is good, because the prices of building materials are lower than they were during the construction boom and many contractors are in need of work. We also have a good opportunity to apply for some energy efficiency grant money to help [continued on page 9]

# Don't Become a Statistic

*Prevent electrical injuries by following a few simple rules*

**E**ach year, approximately 1,000 residents in the United States die as a result of electric shock. An additional 5,000 individuals seek emergency treatment for electric shocks. Approximately 20 percent of all electrically related injuries involve children, with the highest incidence occurring with toddlers and adolescents.

Don't let yourself or members of your family become a figure in these statistics. Prevent electrical injuries by practicing these safety measures.

**Outlets:** Avoid overloading outlets with too many appliances. Wall plates that are broken on an outlet should be replaced as soon as possible. If young children are present, make sure to have safety covers on all of the unused outlets that are accessible to them.

**Plugs:** Check for loose-fitting plugs that can overheat and lead to fire. You should never remove the ground pin in order to make a three-prong plug fit a two-conductor outlet, as that action could lead to electrical shock. All plugs should fit securely into an outlet; a plug should never be forced into an outlet if it does not fit.

**Cords:** Make sure that electric cords are in good condition and are not frayed or cracked. They should never be nailed or stapled to the wall, baseboard or any other object. Furniture should not rest on cords. Cords should not be placed in high-traffic areas of the house. Extension cords are to be used temporarily. They should not be considered permanent household wiring. Both cords and exten-

sion cords should not be overloaded.

**Lightbulbs:** Check the wattage of all bulbs in lighting fixtures to make sure they are the correct wattage for the size of the fixture. Bulbs that have a higher wattage than necessary should be replaced. If you are not sure of the correct wattage, make sure to check with the manufacturer. When inspecting lightbulbs, make sure they are screwed in securely because loose bulbs can overheat.

**Appliances:** Appliances should not be used near water. Only use appliances as they were intended to be used — don't use the toaster oven to dry your socks — and keep them in good working order.

**Computer, entertainment equipment:** Check to see that the equipment is in good condition and working properly. Make sure to look for cracks or any damage in the wiring, plugs and connectors.

**Wiring in the walls:** It is also important to realize that electrical injuries do not always occur from things that are directly visible. Unsafe wiring in the walls of the home can also lead to electrical shocks, fire and other hazards. When having additions, renovations or upgrades done to your house that involve electrical work, it is vital to have a qualified electrician do the work. The electrician should obtain a working permit that ensures a qualified inspector checks the electrical work, making sure it complies with the proper codes.

Taking these safety precautions will help keep you and your family safe and prevent electrical injuries.

## CELEBRATE ST. PATRICK'S WITH A GREEN HOME

**F**rom clovers to leprechauns, green is the color of spring. Get your house in on the trend: Celebrate St. Patrick's Day by turning it green with energy-saving practices.

A few major overhauls can make your house greener or more energy efficient. Some examples include installing energy-efficient doors and windows, buying Energy Star-qualified appliances and investing in solar panels.

Small changes can also save energy on a daily basis and improve the environment. Here are a few changes you can try.

- Replace incandescent bulbs with compact fluorescent lightbulbs, which save energy and last longer. Upgrade light fixtures and lamps that won't accept CFLs.
- Save gas and postage stamps by banking and paying your bills online. Deliver other documents by email rather than regular mail to save time and gas.
- Make it a habit to turn off lights and computers at night or when you're finished using them.
- Lower the heating or raise the air-conditioning set point before you leave the house. Close heating and cooling vents in rooms that you rarely use.
- Before turning on the air conditioner, open a window to cool the house. Install shades or blinds to keep the sun's heat from getting into your rooms.

## MONEY FOR EFFICIENCY

Jim Isgar, Colorado Rural Development State Director, traveled to Gunnison to present GCEA with a \$73,890 grant for providing rural businesses and agricultural producers with energy audits. Attending the ceremony were representatives from the USDA, GCEA, Gunnison County, and the Office for Resource Efficiency. Pictured from left to right are Patty Snidow (USDA), John Vader, Rocky Ferran, Jim Isgar, George Besse, Michael Wells, Helen K. Allen, Bill LaDuke, Vicki Spencer, Marcia Wireman, and Roger Grogg.





# Cooking With Solar Ovens

BY VICKI SPENCER, ENERGY USE AND COMMUNICATIONS SPECIALIST

**T**echnology improvements and tax incentives have made solar electric systems more affordable than ever. However, you don't have to make a large investment in your home or business to take advantage of the sun's energy. Solar cooking is another way of using this free renewable resource, and it can be a lot of fun too.

Solar cookers are a necessity in many less developed countries where firewood is scarce, yet they have become popular in the more developed world as well. Not only can solar cookers be used when you are camping, they can also be used as educational tools. For example, Gunnison High School industrial arts instructor Wyatt Phillips uses a solar oven to teach students about solar energy and the pattern of the sun's movement through the sky.

Local Gunnison resident Jan Scheefer often assists Phillips with his solar oven

demonstrations by providing the cooking ingredients. Phillips' students look forward to the classroom solar cooking demonstrations because they are fascinated by the possibilities of using solar energy in their daily lives. But one of the students did admit that Scheefer's chocolate chip cookie dough is "out of this world." Two recipe books that Scheefer recommends are Rose Marie Kern's *The Solar Chef: A Southwestern Recipe Book for Solar Cooking* and Jennifer Stein Barker's *The Morning Hill Solar Cookery Book*.

There are many different models of solar ovens on the market today. The one that Phillips uses in his classes is a multiple-reflector cooker. Multiple-reflector cookers resemble the box-shaped oven that we normally use for baking, but come equipped with four or more reflectors that tilt to compensate for the sun's position. These ovens can reach temper-

atures up to 425 degrees in the summer, but baked goods will turn out better if you use dark cookie sheets. Similarly, soups and vegetables cook better in dark, thin-walled pots.

Surprisingly to some, solar ovens can also be used in the winter, but this requires a little more care. Regardless of the season, the biggest challenge is that solar cookers must move in line with the sun in order to achieve maximum solar gain. If your cooker is not automated, it means you have to physically move it yourself every 15 to 20 minutes. Although this may seem like a lot of trouble, it is exactly why solar cookers are excellent tools for teaching about solar energy and why they are fun to take camping. You can relax while the sun moves through the sky and with a little bit of patience, you can be rewarded with a delicious, sun-cooked treat.

## GCEA Improving the System

[continued from page 7] offset costs on the remodel portion of the project. With any luck we will be able to start construction around mid-May and complete the project before the end of the year.

Look for changes to start happening soon. We hope you will pardon us for any inconvenience we may cause you during the construction phase. As always, we appreciate hearing from our members and if we may be of assistance or answer questions, please give us a call.



**DAY-LIGHT-SAVING TIME SAVE ENERGY**

Daylight-saving time begins this year at 2 a.m. on March 14.

## A SMART BUSINESS CONNECTION

If you are a business owner interested in connecting with potential customers, GCEA has a deal for you.

The Cooperative Connections® Program promotes your business to thousands of electric cooperative members across the U.S.

Contact GCEA Member Services Department at 970-641-3520 to learn how you can participate in this nationwide marketing program — **FOR FREE.**



## INSULATION REBATES STILL AVAILABLE

*Seal in savings year-round with attic and wall insulation*

- Improve your home's energy efficiency
- Save up to 20 percent on your heating bills
- Make your home more comfortable in the winter

Rebates available on a first-come, first-serve basis until March 31, 2010  
Contact GCEA at 970-641-3520 or visit [www.gcea.coop](http://www.gcea.coop) for information

# What's Going On When the Power Blinks?

**A**t one time or another, we have all returned home from work or woken up late for work to see a blinking "12:00" on our digital alarm clock. The electricity has gone off and on. You then have to reset every digital clock in the household that doesn't have battery backup, from the microwave oven to the answering machine. Usually, this power outage is due to a "blink" in the electrical system.

While this can be annoying, the electrical system is working exactly as it is supposed to when it blinks. There are some steps that your electric cooperative can take to reduce the number of blinks on the power system, but there are also some steps that you can take as well.

First, let's look at what a blink is. Momentary power interruptions, or blinks, can occur anywhere on the power system during generation, during high-power transmission from the generation facility to your co-op substation or during distribution from the substation to your home.

## Why blinks?

Blinks are created when a breaker, or switch, is opened in any portion of the power system. The breaker usually opens because of a large, quick rise of electrical current on the power system. This large rise is called a fault condition and can occur when a tree touches a line, lightning strikes or a wire breaks.

When this happens, a relay senses the

fault and tells the breaker to open, preventing the flow of power to the site where the tree touch, lightning strike or wire break occurred. Then, the breaker quickly closes. The brief delay is to allow the fault to clear the power line and usually lasts less than two seconds.

If the fault is cleared, every electrical service that receives power from that power line has just blinked. This could include thousands of homes and businesses if the breaker protects a transmission line or is a substation breaker.

## Reducing blinks

There are no solutions that can eliminate blinks on the power system, but fortunately there are methods that your co-op implements to help reduce their frequency. Tree trimming is probably the easiest and most used method to reduce possible blinks on the power system. This is where your co-op needs your help. Make sure your co-op knows of any trees or limbs located close to a power line. It has, or it hires, right-of-way crews trained to cut and trim trees near power lines.

## Reducing the blink's effects

Meanwhile, one way to reduce the frustration of blinking clocks is by purchasing an alarm clock with a battery backup. This type of digital clock has "ride through" ability for momentary outages. It will also keep the correct time and sound an alarm in case

of a long-duration outage, provided a charged battery is in place. Another nice thing is that it only uses the battery in the event of a power interruption.

Blinks affect all electrical equipment, not just digital clocks. If there is a blink while you are operating a computer, your computer will crash and you will have to reboot, hoping all the while that there will be few corrupted files. Unfortunately, all the information you were working on will probably be lost. A solution to this problem is to use an uninterruptible power supply or UPS on your computer.

The UPS incorporates surge suppression technology with battery backup. The battery backup provides the computer with a supplementary power source to ride through a blink or longer duration interruption. The battery backup only allows you a short period of time to save any information and exit your computer properly.

## The future of the blink

Blinks will never disappear from our electrical energy delivery system. The best we can do is minimize the effects of the interruptions and the frequency with which they occur.

Your cooperative has an active maintenance program and is always working to identify and fix sources of interruptions. With all those miles of line in the local system, exposure keeps line crews busy.

*This article was written by Scott Turner, a former electric co-op employee, who is an electrical engineering consultant at his firm JD Engineering in Hamilton, Montana.*

## CINDY MUIRHEAD JOINS GCEA

**G**CEA is pleased to welcome long-time Gunnison resident Cindy Muirhead to the co-op team. After venturing to Nebraska to study accounting, Cindy returned to Gunnison where she put her accounting skills to work at Gunnison Bank and Trust and Cliggett & Associates before settling down at Gunnison County Abstract Company, where she excelled in closings and title research for 15 years. Now, Cindy is returning to the accounting world in her position as GCEA's accounting assistant.

Cindy's husband is employed by the Colorado Department of Transportation and her son is a junior at Gunnison High School. Cindy says that her favorite pastime is watching her son play sports. As a past volleyball coach, it's fun to watch the games from a parent's perspective.



**Cindy Muirhead**

## GCEA EMPLOYEE ANNIVERSARIES

Sherry Booth, operations assistant, 4 years

Alantha Garrison, member services assistant, 3 years

Erica Soerensen, billing supervisor, 14 years

Carol Townsend, line locator technician, 8 years