

Beat Those High Winter Electric Bills

Trying to figure out winter weather patterns in Tennessee is more difficult than trying to figure out which came first, the chicken or the egg. One day we're enjoying mild temperatures in the 60s and then, almost overnight, were fighting against temperatures in the teens.

This also makes tracking our energy usage difficult and can make for some surprisingly high electric bills. Cold weather pushes up electric bills, even for families who don't use electricity for their primary heating source. Some reasons that help explain higher electricity use in cold weather include:

- Shorter days mean we use indoor and outdoor lights more
- We use additional space heaters more often
- Electric blankets
- We watch more TV
- Heating systems and heating system fans run more
- We cook more hot meals
- We spend more time indoors

With a little effort we can fight back against higher electric use and avoid higher bills. The first rule of thumb to keep in mind is moderation – whether it's lighting or heating.

First, here are some fast and free ways to trim electricity use:

• Turn Down Your Thermostat

For every degree you lower your heat in the 60-degree to 70-degree range, you'll save up to 5% on heating costs. Wear warm clothing and set your thermostat to 68 degrees or lower during the day and evening, if health permits. Set the thermostat back to 55 degrees or off at night or when leaving home for an extended period of time. This can save from 5 to 20 percent of your heating costs. (Heat pumps should only be set back five degrees.)

• Eliminate Wasted Energy

Turn off lights in unoccupied rooms. Turn off bathroom and kitchen ventilation fans after they have done their job. These fans can blow out a house full of heated air if inadvertently left on. Keep your fireplace damper closed unless a fire is burning to prevent up to 8% of your furnace-heated air from going up the chimney.

• Reduce Hot Water Temperature

Set your water heater to the "normal" setting or 120 degrees, unless the owner's manual for your dishwasher requires a higher setting. This can save 7 to 11 percent of water heating costs. Shorten your showers. Showers account for 2/3 of your water heating costs. Cutting your showers in half will reduce your water heating costs by 33 percent.

• Use Appliances Efficiently

Do only full loads when using your dishwasher and clothes washer and dryer. Select the air dry setting on your dishwasher and on your clothes washer use the cold water setting whenever you can. Be sure to clean the lint trap on your clothes dryer after each use and use the moisture-sensing automatic drying setting if you have one.

• Put Your Computer and Monitor to Sleep

Most computers come with the power management features turned off. On computers using Windows 98/ME/2000 open your power management software and set it so your computer goes to sleep if you are away from your machine for 5 to 15 minutes. Those who use Macintosh computers look for the setting in your Control Panels called "Energy Saver" and set it accordingly. When you're done using your computer turn it off (see next tip). Do not leave it in sleep mode overnight as it is still drawing a small amount of power.

• Plug "Leaking Energy" in Electronics

Many new TVs, VCRs, chargers, computer peripherals, and other electronics use electricity even when they are switched "off." Although these "standby" losses are only a few watts each, they add up to more than 50 watts in a typical home. If possible, unplug electronic devices and chargers that have a block-shaped transformer on the plug when they are not in use. For computer scanners, printers, and other devices that are plugged into a power strip, simply switch off the power strip after shutting down your computer.

In addition to these fast and free methods of saving energy, there are several **inexpensive energy solutions** that can help cut your winter electric bills.

• Replace or Clean Furnace Filters Once a Month

Dirty filters restrict airflow and increase energy use. Keeping your furnace clean, lubricated, and properly adjusted can save up to 5% on heating costs.

• Replace Bulbs Wisely

Replace incandescent light bulbs with compact fluorescent light bulbs. Compact fluorescent lights use 75% less energy than incandescent lights.

Visit to India Spurs Deeper Appreciation for Many Things We Take for Granted



Working mainly with a pair of needle-nose pliers, and without benefit of safety equipment other than a rope to tie himself to the pole, this electrician in Burma Nagar, India works to restore power.

After more than 23 years with Volunteer Energy Cooperative (VEC), Wanda Lane has seen plenty of growth and progress in the electricity distribution business.

As a human resources professional in VEC's Corporate Offices in Decatur, she's played a big role in that progress. But when she made a trip to India recently to visit her daughter and son-in-law who are missionaries there, she gained a greater appreciation for how easily we can take reliable and safe electricity for granted.

Ms. Lane was working with Rusty and Audrey Swafford, her daughter and son-in-law at a medical clinic at Burma Nagar Church of Christ in the southern part of India on December 29, 2003. The power went off.

Ms. Lane said everyone there hardly missed a beat as they gathered up candles and positioned them so the volunteer medical professionals could see and business continued pretty much as usual.

"It seems the power goes off in some areas so frequently there, no one seemed to think much of it," Ms. Lane said.

Quite some time after the outage was reported to the power company, an electrician contracted by the power company came to work on the pole outside the church.

He arrived on a motor scooter with his tools in a box on the side and his rope and pole stand, that he uses to support himself on the utility pole, were strapped onto the scooter. Without gloves, a hardhat, or even shoes, he began climbing the heavily loaded utility pole.

Upon reaching his destination in the maze of wires on the utility pole, he hung a single wooden stick to stand on and tied himself to the pole for his only security. Working mainly with a pair of needle-nose pliers, he was able to restore power to the medical clinic.

Workplace safety is emerging as one of the biggest concerns in India with an average of 125 deaths and 50,000 people injured each workday, according to the Times News Network.

Ms. Lane said, however, that despite the poverty and hardships she witnessed in some areas of India, she found the people to be friendly and outgoing. She said she was glad to return to the relative comforts of home, but says she enjoyed India very much and is likely to return.

Levelized Billing Option Will Keep Bills, Well, LEVEL

by Bill Buchanan, President/CEO

As you read this, we are slowly seeing the beginning of the end of the winter weather. The days are noticeably longer and I may have even seen a bud or two on trees and shrubs. Maybe I'm being a bit optimistic, but this time of year I can envision the advent of spring and warmer temperatures right around the corner.

According to the data we compile, the temperatures in December were lower than last year. December's monthly heating degree days in 2003 totaled 819; in December 2002 there were 803 heating degree days. (Heating degree days are the total number of days in the month in which the average daily temperature falls below 65°. The greater the number of heating degree days, the more energy it takes to warm homes and businesses.)



As a result many Volunteer Energy Cooperative customers saw electric bills spike in December and January due to increased usage brought on by the colder weather. This spring, VEC will soon introduce a program that will keep electric bills more consistent from month to month: levelized billing.

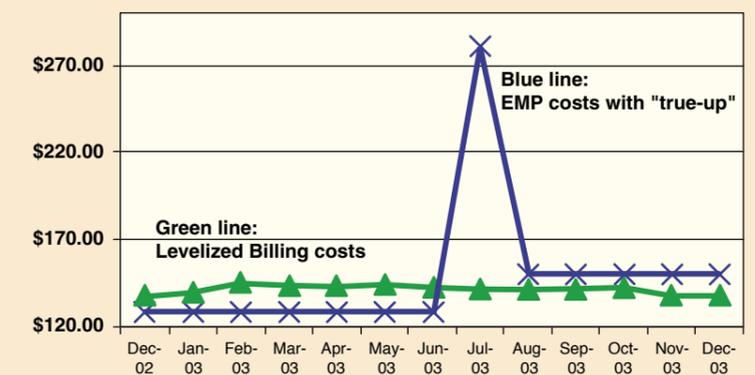
Levelized billing will be an option that replaces the current Equal Monthly Payment (EMP) plan. Levelized billing calculates an average cost based on a 12-month moving average of electric usage. Unlike EMP, levelized billing customers will not have a yearly "true-up" – the average simply will re-calculate each month. As the name implies, the goal of levelized billing is to make customer bills more LEVEL.

Below is a graph comparing EMP to levelized billing from an actual customer usage history. As you can see, levelized billing smoothes out most of the fluctuation in the amount a customer pays. Each month's levelized bill varies slightly (in this example, the variation was never more than \$6 and was about \$2 during most months).

Levelized billing will be available to VEC customers beginning in late spring and will replace the current EMP program. I believe that levelized billing is an improvement that will help our customers better manage their household expenses.

Watch your electric statement in the coming months for more information about levelized billing.

EMP vs. Levelized Billing



VECcustomers *Share*

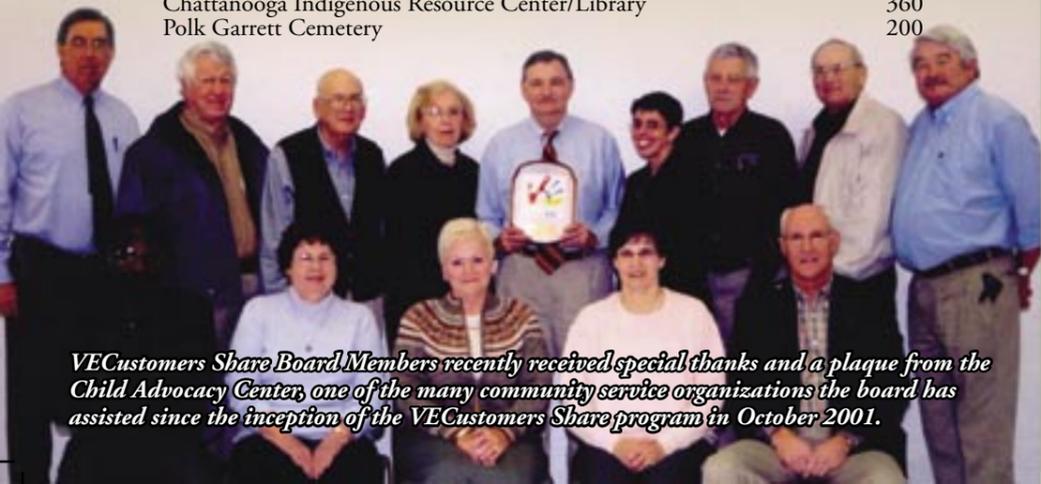
Your Change Changes Things

Hunger relief ministries, educational and recreational supplies for students, and equipment for volunteer firefighters were among the causes assisted by Volunteer Energy Cooperative customers who pooled their pennies through the VECcustomers Share program in December. The VECcustomers Share board of directors funded grants totaling \$32,429 in December. Since the inception of the program in October 2001, a total of \$880,505.25 in grants has been awarded. VECcustomers Share is a non-profit, tax exempt charitable organization covering VEC's 17-county service area. The foundation's funds are derived from Volunteer Energy Cooperative members who allow their electric bills to be rounded up to the nearest \$1. The additional amount goes into the VECcustomers Share fund, which is administered by the foundation's board of directors whose 12 members serve as volunteers.

VECcustomers Share contributions average 50 cents per month or \$6 per year for each participating residential customer. Approximately 80 percent of VEC's customers are donating to the program. The deadline for grant applications is the last day of each month. For additional information, contact Patty Hurley, manager of member services, at 423-334-7050. Applications are also available for download at: www.vec.org.

Organizations receiving grants in December include:

Snow Hill Elementary School PTA	\$2,000
Cumberland Homestead Tower Association	1,800
Cumberland County Historical/Genealogical Society	1,700
Moodyville Volunteer Fire Department	1,660
Polk County High School Band Boosters	1,600
Storie Cemetery Association	1,600
Cleveland State Cougar Club	1,600
The Hope Center	1,500
Harvest Outreach Ministries	1,500
Meigs County After-School Outreach Program	1,500
Operation REACH	1,230
Glade Creek Senior Citizens	1,000
Pickett County K-8 Leadership Conference	1,000
Food Pantry Luminary UMC	1,000
Hales Chapel	920
Tennessee Valley Theatre	730
York Elementary School PTO	700
Benton Elementary School Library	630
Witt Community Cemetery	630
Tennessee Sons of the American Revolution	630
South Fentress Elementary School PTO	560
Mineral Springs Hunger Relief Ministry	500
OES Monterey 502	500
Child Advocacy Center (CAC)	500
Decatur Cemetery Corporation	500
Ooltewah High School Soccer Booster Club	500
Discovery Club	500
Mountain Volunteer Fire and Rescue	460
McMinn Retired Teachers	453
McMinn County Living Heritage Museum	453
Athens Travelers	453
Burks Middle School PTSO	400
Cumberland County High School Advanced Choir Booster Club	400
Pleasant Hill Child Enrichment Center	400
Meigs Ministries	360
Chattanooga Indigenous Resource Center/Library	360
Polk Garrett Cemetery	200



VECcustomers Share Board Members recently received special thanks and a plaque from the Child Advocacy Center, one of the many community service organizations the board has assisted since the inception of the VECcustomers Share program in October 2001.



HOME SAFETY:

Frequently Asked Questions



What are the latest statistics on residential electrical deaths and injuries?

The latest figures from the U.S. Consumer Product Safety Commission (CPSC) indicate that there were 440 total accidental electrocutions in the United States in 1999, 170 related to consumer products. Twenty-nine of those related to household wiring, 29 to small appliances, 22 to large appliances, 15 to power tools, 13 related to ladders, 12 to garden/farm equipment, and 9 to lighting equipment. But that is only part of the story. According to the latest statistics from the National Fire Protection Association (NFPA), an annual average of 111,400 home fires are caused by faulty electrical distribution systems, electrical appliances and equipment, or heating and air conditioning systems, taking an average of 860 lives, injuring 3,785 and causing nearly \$1.3 billion in property damage.

How can consumers help protect themselves from electricity-related injuries?

Consumers should check for problems in their home electrical systems. Check outlets and extension cords to make sure they aren't overloaded. Examine electrical cords to make sure they aren't frayed, damaged or placed under rugs or carpets. Make sure that the proper wattage light bulbs are being used in light fixtures and lamps. Consider installing ground fault circuit interrupters (GFCIs). One of the most important precautions consumers can take is to test their smoke detectors and to replace smoke detector batteries annually. Consumers should always follow appropriate safety precautions and manufacturer's instructions.

If you have an old house with old wiring, how do you know if repairs are necessary? How extensive and costly can such repairs be?

Electrical systems age and can become overloaded, particularly in older homes. Over the years as more lighting, appliances and equipment are added, the electrical system becomes overburdened and problems can develop. If fuses blow or circuit breakers protecting branch circuits trip frequently, new branch circuits or other repairs may be necessary. Depending on the condition of the equipment and the extent of the repairs, the cost may be nominal or could run into several thousand dollars. A qualified licensed electrician can determine if repairs are necessary and can estimate the cost.

How does a three-prong plug work? What's the benefit of using it?

The third prong on a three-prong cord set provides a path to ground for electricity that is straying or leaking from a product. This helps protect the equipment and can help prevent electric shock.

How does a polarized plug work? What's the benefit of using it?

A polarized plug is a plug with one large or wide prong and one narrow one. It ensures that the plug is inserted correctly in a socket and reduces the risk of electrical shock.

What is a GFCI?

A ground fault circuit interrupter or GFCI, is an electronic device for protecting people from serious injury due to electric shock.

Beetle Pines Still Adding to Right-of-Way Costs

Clearing beetle pines, the dead pine trees left after they've been killed by the Southern Pine Beetle, has already cost Volunteer Energy Cooperative (VEC) more than \$1 million and the work is still ongoing.

Jim Runyan, VEC Supervisor of Vegetation Control, said there are still six particularly bad spots left in the VEC service area. "The dead pines have a weak root structure and that means they are blown over easily in heavy rains," Runyan said.

Contract right-of-way crews are working to clear the beetle pines and other vegetation in rights-of-way to give VEC crews better access to lines during an outage and to help prevent outages by keeping trees and brush away from power lines.

VEC Right-of-Way Clearing Schedule March 15 – April 15, 2004

Service Area Crew	Work Area
Benton	South Polk below Ladd Springs Road
Byrdstown	Robbinstown
Cleveland	Bi-Weekly Pick-ups and Hot Spots
Crossville #1	Highway 127 North, Bowman Road, and Tabor Loop
Crossville #2	Highway 127 North, Bowman Road, and Tabor Loop
Crossville #3	Highway 70 North
Decatur	Woods Hollow Road and Riceville
Georgetown	Bi-Weekly Pick-Ups and Hot Spots
Jamestown #1	Highway 52 East and Armathwaite
Jamestown #2	Highway 154 and Park Road
Monterey	Highway 70 North
Spring City	Bi-Weekly Pick-Ups and Hot Spots

VEC Crews and Contractors are Inventorying Poles Again

Volunteer Energy Cooperative customers may notice some new faces in the neighborhood over the next several months.

Rody Blevins, Manager of VEC's System Planning and Engineering Department, said employees and contractors will be mapping and recording inventory on more than 200,000 utility poles across the cooperative's 17-county service area. He said all the employees and contractors will be wearing VEC identification badges and they won't need to ask for anything from customers.

"We are implementing a new mapping software system for the entire VEC service area," Blevins said. "The workers are generating data so we can use Global Positioning Satellite (GPS) technology to cut down on the time it takes to restore power during an outage and to improve engineering and planning efforts."

The workers must stand next to each pole to record its exact location for the GPS system and while they are there, they will also be recording all the equipment such as transformers, cross poles, etc. that are on the pole. Since some of the poles are located on private property, workers will need to access the property to get to the pole.

All the information collected will be recorded into a new Geographical Information System. The system will work with outage management software and interactive voice software to determine the exact location and nature of the problem during an outage.