

When It Comes to Energy Efficiency and Energy Conservation, the Little Things Add up

It's no secret that it is much easier to get people to support a cause if they understand the reason behind it and the potential impact they can have on the outcome. According to www.campaignearth.org Americans make up 4% of the world's population but consume 26% of its resources. We are not a society accustomed to conserving.

And do small steps really make a difference when it comes to energy efficiency and energy conservation?

Well consider:

- Each incandescent light bulb replaced with a CFL reduces the amount of CO2 released into the atmosphere by 150 pounds per year.
- Studies indicate that when we drive, we spend an additional \$0.20 per gallon of gas and reduce our fuel efficiency 7%-23% for every 5 miles per hour (mph) over 60 mph. And if we each drove just 20 miles less per week for one year, we would reduce the amount of CO2 released into the atmosphere by 900 pounds. Even a simple adjustment like keeping your tire pressure at the recommended level can increase the fuel efficiency of your car. None of these solutions significantly impact your daily life but collectively they make a big difference.
- If you leave your TV on when you aren't watching it, consider this – a typical 27" widescreen LCD that runs 16 hours a day will cost you about \$7 extra per month on your electric bill.
- If you run a small space heater eight hours a day, it will cost you about \$16 extra per month on your electricity bill.
- In winter set your thermostat at the lowest comfortable setting. Each degree above 68 that you set your thermostat during winter can increase your heating bill by as much as 4%.
- Keep your fireplace damper closed at all times except when a fire is going. Accidentally leaving the chimney flue open is like leaving a two foot square window open. You also want to make sure that when the damper is closed, it closes snugly and doesn't leave gaps where air can escape.
- Participate in the VEC/TVA do-it-yourself Home e-Valuation survey (*See the related article in this issue of Powerlines*).

Project Deserve Needs You

Volunteer Energy Cooperative's Project Deserve program allows you to help the elderly, handicapped, low income and unemployed with their electric bills in emergency situations. You can do this by pledging a specified amount of money to be added to your monthly bill.

All funds collected through Project Deserve go directly to an energy fund. No funds will be used to administer the program. Eligibility will be determined solely by human resource agencies and/or community relief groups in all or portions of the VEC's 17-county service area.

Winter weather is upon us, and this is the time of year when more families ask Project Deserve for assistance with their electric bill. Your contribution to Project Deserve will help these families in their time of emergency.

You may contribute monthly or you may make a one-time contribution. One-time contributions should be mailed to Project Deserve, P.O. Box 277, Decatur, TN 37322. Should you ever wish to cancel your monthly Project Deserve contribution, you can do so by contacting your local VEC customer service center.

VEC has Several Projects Under Way to Improve Service and Lower Costs

Providing reliable electric service to more than 108,000 customers in all or part of 17 counties across the Tennessee Valley is a big job. We are constantly working to keep up with the ever-increasing demand for reliable service. Here's a status report on several of our 2008 projects:

New Georgetown Customer Service Center

We moved into our new Georgetown Service Center at the end of September. Modeled after our Spring City Customer Service Center, our newest office is located on Mahan Gap Road near the intersection of Ooltewah Road. The new office accommodates updated technology and service equipment that will help provide a higher level of service to customers in Hamilton County.



Substation Projects

The South Bradley Substation was completed and put into service during the summer. The Monterey Substation has been upgraded. The new portion of the substation was put into service in May. The new Crab Orchard Substation was completed this fall and put into service in November. The substation will help us meet the increasing demand we are facing in that area.

Automated Meter Reading

We have installed more than 54,000 Automated Meter Reading (AMR) meters across the VEC service area. We are currently reading about 48,000 meters remotely from 13 substations. As 2008 ends and 2009 begins we are installing meters in Spring City, Fairfield Glade, Sugar Grove, and Ravenscroft. In addition to providing a greater degree of billing accuracy, our AMR project is allowing us to keep costs down and decrease our carbon footprint significantly.

New Call/Control Center

In an effort to provide more efficient customer service, we are constructing a new centralized call/control center at our corporate offices in Decatur. As 2008 comes to an end the block walls are going up. We are anticipating that the project will be complete in the middle of May 2009.

Right-of-Way Maintenance

During 2008 VEC continued our commitment to improve service and reduce the number of power outages by clearing rights-of-way and changing out old poles. During 2008 we replaced more than 1,000 deteriorating poles and we will continue this emphasis through 2009.

Program to Help Customers Save Money on Electric Bill Extended

Because the program has been successful in encouraging Tennessee Valley residents to use energy more efficiently, Volunteer Energy Cooperative (VEC) and TVA are extending the free do-it-yourself Home e-Valuation Survey through October 2009.

More than 41,000 Tennessee Valley residents have taken the energy audit since mid-January, 2008 and 75 percent of those who responded to recent surveys said they have made changes in their home energy use as a result. Participants who complete the online or mail-in version of the home energy audit receive a free starter kit and Personal Energy Profile Report that suggests ways residents can save money on their electric bills.



Surveys indicate that virtually all participants who made changes are reducing lighting use, and more than 90 percent are making changes in cooking habits and the heating and cooling of their homes.

Lighting changes include turning off lights and replacing standard incandescent bulbs with compact fluorescent bulbs (CFLs). Home heating and cooling changes include increasing the temperature on the cooling system at least eight hours per day, decreasing the temperature for the heating system at least eight hours per day and avoiding the use of electric space heaters.

Lighting, heating, and cooling contribute to about 63 percent of the average consumer's monthly energy bill in the Tennessee Valley.

Consumers who use all the contents of the free starter kits could see a savings ranging from \$2 to \$4 on monthly power bills, depending on their individual energy use. Following all the recommendations from the audit could save as much as 20 percent on annual utility costs.

Other survey results showed that 88 percent of those making changes have implemented water heater or water usage energy-saving measures; 46 percent have added insulation, 82 percent are washing clothes in cold water and 77 percent are making sure they turn off computers when not in use.

Residents may take the home energy audit online by visiting www.tva.com or www.vec.org or request a paper copy of the audit by calling their local VEC Customer Service Center.

Each kit includes a comprehensive "How to Save" brochure and two compact fluorescent light bulbs that use 75 percent less electricity and last 10 times longer than traditional light bulbs. The kit also includes:

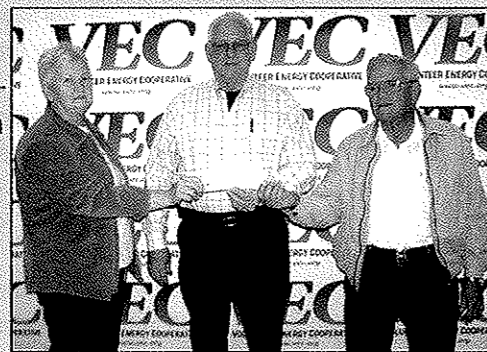
- A filter whistle that sounds when the heating or cooling system filter is 80 percent clogged and needs to be changed.
- Outlet and light switch gaskets – insulation to help stop drafts and save energy
- Faucet aerators (two) – water-saving filters that improve efficiency
- Hot water temperature card that measures temperature of hot tap water and indicates if a thermostat adjustment is needed to save money and prevent water scalds
- Energy-use thermometer gauge that helps check energy costs for heating and cooling.

VEC Customers Share

A Little Change Can Go a Long Way

Through the generosity of Volunteer Energy Cooperative (VEC) customers who allowed their electric bills to be rounded up to the next whole dollar, the VEC Customers Share program funded \$33,365 in community service grants in November. Since the inception of the program in October 2001, more than \$2.8 million in grants has been awarded. The deadline for grant applications is the last day of each month. For additional information, contact the office of Marketing and Economic Development, at 423-334-7051. Applications are also available online, at www.vec.org.

Organizations receiving grants in November include: Knights of Columbus Council 8152, Crossville - \$2,200; Pickett County K-8 Eighth Grade Language Arts/English Club - \$1,503; Fentress County Public Library - \$1,500; Benton Lions Club - \$1,500; Operation REACH, Kingston - \$1,500; Tennessee Emergency Communications Association, Crossville - \$1,500; McMinn County Foster Care Association - \$1,500; Girl Scout Troop 311, Ten Mile - \$1,500; Banner-Roslin Community Center, Jamestown - \$1,500; Pickett County K-8 Seventh Grade



VEC Customers Share Board Member Jerry Stephens, center, presents a grant check to Helen Allen and Roy Burris of Linsdale Community Services.

Language Arts/English Club - \$1,497; Providence Baptist Church Food Pantry, Ooltewah - \$1,200; Birchwood Elementary School PTA - \$1,015; Monterey Garden Club - \$1,000; Monterey Civitan Club - \$1,000; Rhea County 4-H - \$1,000; Midway Elementary School PTA - \$1,000; Linsdale Community Services, Delano - \$1,000; Glade Creek Community Center, Sparta - \$1,000; Bradley/Polk Foster Adoptive Care Association - \$1,000; Cumberland County 4-H - \$700; Art Guild of Fairfield Glade - \$600; Toys for Children, Spring City - \$600; Polk County Food Bank - \$500; Mt. Carmel Ladies of Action, Decatur - \$500; Tennessee Christian Academy Family Teacher Association, Cleveland - \$500; Krush Youth Athletic Association, Decatur - \$500; Mustang Insider Journalism Club, Cleveland - \$500; Calhoun Elementary School PTO - \$500; Full Circle Women's Services, Athens - \$500; Candlelighter's Family Support Group, Hamilton County - \$500; Rhea County High School Cross Country Team Booster Club - \$500; Wilson Elementary School Athletic Club - Crawford - \$500; Friends of the Library, Spring City - \$400; Bradley Central High School Softball Boosters - \$400; Michigan Avenue School PTO, Cleveland - \$255; AARP Tax Aide Program, Cleveland \$200; Polk County Literacy - \$150; and Charleston Elementary School PTO - \$145.

VEC Offers College Scholarships

Volunteer Energy Cooperative (VEC) wants to reward students who have used their time and talents to benefit their local communities. VEC's Lillard-Shadow scholarship program rewards academic and community service achievements by awarding four \$2,000 scholarships to students who will graduate from high schools in VEC's service area in the spring of 2009.

The scholarships honor J.W. Lillard and Willis A Shadow, two community leaders who spearheaded efforts to bring electric power to Decatur and Meigs County in the 1930s, forming the organization that would become Volunteer Energy Cooperative.

Four awards of \$500 per semester each (renewable for up to four semesters) will be presented to spring 2009 high school graduates whose parents or guardians are VEC electric customers. Applications will be judged by an independent panel based on student's community service activities and citizenship - 40%; written communication skills - 20%; financial need - 25%; and academic achievement - 15%.

Scholarship applications are available at any VEC Customer Service Center or from high school counselors in the VEC service area. Applications are also available online at www.vec.org.

All application materials must be completed and delivered to VEC's Cooperate Office in Decatur no later than 5 p.m. Eastern Time on March 2, 2009.

Need a New Heat Pump?

Volunteer Energy Cooperative (VEC) and TVA have extended the 6% finance rate for replacement heat pumps installed through the energy right® program until March 31, 2009. If you are considering a replacement heat pump, call your local VEC Customer service Center for more information today.

VEC Family Shares Their Best Recipes with Your Family

Volunteer Energy Cooperative employees are putting together a sumptuous sampling of some of their favorite family recipes to share with your family. The recipes are available, absolutely free, at: www.vec.org. Just look for the recipe link on the home page. *Here's a sneak peek:*

Banana Bread 12 servings

Native to the Caribbean and Central America, bananas are one of America's favorite fruits. They are rich in potassium - one banana contains 450 mg, one-fifth of the adult daily requirement - and offer a fair share of magnesium (33 mg), too. In addition, bananas help to strengthen the stomach lining and are good for soothing indigestion. Most banana bread recipes are saturated with butter and sugar. This one uses a small amount of canola oil instead - which is much better for your heart - and honey, which of course means lots of flavor. Don't use regular whole-wheat flour. It is too heavy for this recipe. Look for whole-wheat pastry flour instead.

Connie - Corporate Offices

Nutritional Information:
Per serving: 200 calories, 8g total fat (1g sat), 0mg cholesterol, 32g carbohydrate, 3g protein, 3g fiber, 203mg sodium

3 very ripe bananas
1/2 cup honey
3 tbsp canola oil, plus a little more for oiling the loaf pan
1 tsp pure vanilla extract
1 1/2 cups whole-wheat pastry flour
1 1/2 tsp baking soda
1/4 tsp salt
3/4 cup chopped walnuts or pecans

1. Heat the oven to 350 degrees. Lightly oil a loaf pan.
2. Mash the bananas and mix with the honey, canola oil, and vanilla extract.
3. Stir together the whole wheat pastry flour, baking soda and salt. Add the nuts.
4. Blend the two mixtures and spoon into a lightly oiled loaf pan. Bake for 40 minutes, or until center is set.

Safety Checklist: Check the Items on This List Created By the National Electrical Safety Foundation

Outlets: Check for outlets that have loose-fitting plugs, which can overheat and lead to fire. Replace any broken or missing wall plates. Make sure there are safety covers on all unused outlets that are accessible to children.

Cords: Make sure cords are in good conditions- not frayed or cracked. Make sure they are placed out of traffic areas. Cords should never be nailed or stapled to the wall, baseboard, or to another object. Do not place cords under carpets or rugs or rest any furniture on them.

Extension Cords: Check to see that cords are not overloaded. Additionally, extension cords should only be used on a temporary basis; they are not intended as permanent household wiring. Make sure extension cords have safety closures to help prevent young children from shock hazards and mouth burn injuries.

Plugs: Make sure your plugs fit your outlets. Never remove the ground pin (the third prong) to make a three-prong fit a two-conductor outlet; this could lead to an electrical shock. **NEVER FORCE A PLUG INTO AN OUTLET IF IT DOESN'T FIT.** Plugs should fit securely into outlets. Avoid overloading outlets with too many appliances.

Ground Fault Circuit Interrupters (GFCIs): GFCIs can help prevent electrocution. They should be used in any area where water and electricity may come into contact. When a GFCI senses current leakage in an electrical circuit, it assumes a ground fault has occurred. It then interrupts power fast enough to help prevent serious injury from electrical shock. Test GFCIs regularly according to the manufacturer's instructions to make sure they are working properly.

Light Bulbs: Check the wattage of all bulbs in light fixtures to make sure they are the correct wattage for the size of the fixture. Replace bulbs that have higher wattage than recommended; if you don't know the correct wattage, check with the manufacturer of the fixture. Make sure bulbs are screwed in securely; loose bulbs may overheat.

Circuit Breakers/Fuses: Circuit Breakers and fuses should be the correct size current rating for their circuit. If you do not know the correct size, have an electrician identify and label the size to be used. Always replace a fuse with the same size fuse.

Appliances: If an appliance repeatedly blows a fuse, trips a circuit breaker, or if it has given you a shock, unplug it and have it repaired or replaced.

Entertainment/Computer Equipment: Check to see that the equipment is in good condition and working properly; look for cracks or damage in wiring, plugs, and connectors. Use a surge protector bearing the seal of a nationally recognized certification agency.

Lightning: During an electrical storm, do not use appliances (i.e., hairdryers, toasters, and radios) or telephones (except in an emergency); do not take a bath or shower; keep batteries on hand for flashlights and radios in case of a power outage; and use surge protectors on electronic devices and appliances.

Space Heaters: Space heaters are meant to supply supplemental heat. Keep space heaters at least 3 ft. away from any combustible materials such as bedding, clothing, draperies, furniture, and rugs. Don't use in rooms where children are unsupervised and remember to turn off and unplug when not in use.

Halogen Floor Lamps: Halogen floor lamps operate at much higher temperatures than a standard incandescent light bulb. Never place a halogen floor lamp where it could come in contact with draperies, clothing, or other combustible materials. Be sure to turn the lamp off whenever you leave the room for an extended period of time and never use torchiere lamps in children's bedrooms or playrooms.