

## Observing National Co-op Month in October

We are joining 30,000 cooperatives nationwide in October to celebrate National Co-op Month. This national celebration recognizes the many ways cooperatives are committed to strengthening the local communities they serve. "Co-ops Commit" is the theme for this year's celebration, spotlighting the countless ways cooperatives meet the needs of their members and communities.

Our cooperative delivers electricity to 115,000 plus member-owners in our 17 county service area. Delivering safe, reliable, affordable power is our top priority, but we are also invested in our communities because we are locally owned and operated. Revenue generated by VEC goes back to Main Street, not Wall Street.

Rural America is served by a network of about 1,000 electric cooperatives, most of which were formed in the 1930s and 40s to bring electricity to farms and rural communities that large, investor-owned power companies had no interest in serving because of the higher costs involved in serving low-population and low-density areas. VEC was formed in 1935 to bring power to an area which at that time was bypassed by the existing power companies.

In addition to providing the vital power co-op members depend on, we show our commitment by economic development and job creation, youth leadership opportunities, free safety education and charitable giving. Working together with our members we serve in our communities on local chambers, fire departments, and many other organizations to strengthen our communities that our co-op is committed fully too.

One of the ways we celebrate National Co-op Month will be hosting our annual meeting where we give away flu shots, door prizes, free entertainment and much more. We are also hosting food drives at several local service centers. Since our service area is so vast we are donating the food to the area where our service center is located.

October is a good time to remember that we are different from a for-profit business. We are member owned and that ownership spurs us to a deep commitment to the communities we serve.



Rody Blevins  
President/CEO  
Volunteer Energy Cooperative

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- **Youth Leadership Summit.** Each spring VEC brings two high school juniors from across our service area to Nashville to learn about leadership, government and electric cooperatives. They learn decision making skills, visit the State Capitol and experience intensive leadership training.
- **4-H Electric Camp.** VEC and other Co-ops also partner with the state 4-H programs to put this on each summer. It is a fun, rewarding adventure in all-things electricity designed for 6th and 7th graders. Students learn what electricity is and how it works. They will work with electrical specialists from co-ops across the state in hands-on learning centers and get to explore careers in energy, engineering, technology and math.
- **Washington Youth Tour.** Perhaps our most popular program, the Washington Youth Tour Creative Writing Contest is open to high school juniors. Participants write short stories about electric co-ops. The winners receive an all-expenses-paid trip to Washington, D.C., to learn about government, public policy, electric cooperatives and leadership. They can also win a share of more than \$15,000 in scholarships. Students return better prepared to be a leader in their school and community.

VEC is serious about preparing the next generation to be leaders in our communities. Teachers, administrators and parents can contact Julie Jones at 423-334-7052 to learn more.

While it does cost money to provide these programs, it also costs our community if we do not. We are passionate about the communities we serve, and we are proud to invest in the next generation of leaders. These young people will eventually become teachers, attorneys, county commissioners and doctors who serve our communities. We think preparing them to be leaders is money well spent.



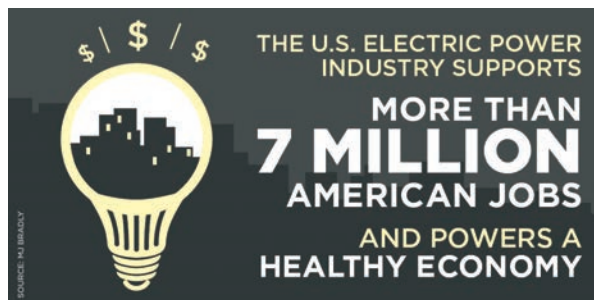
## Electric Sector's Economic Benefit is \$880 Billion, New Study Finds

Electric co-ops and other parts of the U.S. power industry support more than 7 million American jobs and power a healthy economy, according to a new study. The report, published by M.J. Bradley & Associates, estimates that the total economic benefit of the electric power industry is \$880 billion annually – 5 percent of America's Gross domestic product.

"Affordable and reliable electricity is the heartbeat of the American economy," said Rody Blevins, CEO and President Volunteer Energy Cooperative (VEC). "For 82 years, VEC has powered and empowered eastern Tennessee - providing jobs and creating economic opportunity in the process. As not-for-profit utilities owned by our members, electric cooperatives are deeply invested in the communities that we serve. We're proud to play a key role in shaping the local economy."

According to the study, 1 in every 20 American jobs is supported by the electric power sector. The industry directly provides nearly 2.7 million jobs across the

nation through its employees, contractors and supply chain, and investments. It also supports an additional 4.4 million jobs indirectly. For more information about the study you can go to <http://mjb Bradley.com/about-us/case-studies/powering-america>.



## Volunteer Energy Cooperative Provides Programs to Help Schools Succeed

Volunteer Energy Cooperative (VEC) is a consumer-owned, not-for-profit electric utility that serves more than 115,000 meters in part or all of 17 counties.

VEC cares about the communities we serve, and our communities succeed when our schools succeed. That's why our employees spend a lot of time working with our local schools. These are a few of the programs we offer.

- **Safety programs.** VEC provides safety education for classes from preschool to high school.
  - o The Danger High Voltage demonstration is a classroom demonstration that targets elementary and middle school students. This fun demonstration shows students how to be safe when playing outdoors.
  - o Our Everyday Safe demonstration trailer is for junior and senior high students as well as adult groups. The trailer features a full-size mockup of a powerline and shows the dangers using actual voltage. It is both fun and memorable.

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## The Fine Art of Getting the Lights On

Mother Nature can often be unpredictable, and when she gets angry, you may find yourself without power. Storms, floods, tornadoes, snow and ice pose major threats to all kinds of infrastructure, including our electric distribution system.

Electric co-ops like Volunteer Energy Cooperative (VEC) serve more than 71 percent of the state's landmass, including some of the most remote areas in Tennessee. During a widespread outage, we must use our time and resources wisely to minimize the impact on our members.

When the lights go out, we start by assessing the damage. Our goal is to restore service to the greatest number of members in the shortest amount of time possible. This is how we do it.

Our crews first inspect substations. Damage to TVA supply lines or substations could affect thousands of members, so these areas are our first priority.

If the problem cannot be isolated at a substation, main distribution lines are checked next. These are the lines you're most likely familiar with. Distribution lines carry power to large groups of members in VEC's service area.

Smaller "single-phase" lines are examined next. These lines supply individual subdivisions and roads. Damage here could impact anywhere from dozens of members to entire neighborhoods.

Finally, we repair service lines that connect individual homes. Keep in mind that we cannot repair anything attached to your home. If you have damage to your weather head or meter base, this will need to be repaired by an electrician before our crews can reconnect your service.

In recent years, technology has significantly improved the restoration

process. VEC has implemented a SCADA system that allows our dispatchers to see in real time what is happening at the substations from a centralized location reducing the diagnostic time. We also have an app that our customers can report an outage on and receive information regarding their outage restoration time.

Our team at VEC is passionate about keeping the lights on. In the last 3 months our average member has had service 99.46 percent of the time, and we are improving that statistic each year. However, we know that extended outages are inconvenient for your family, and you can be confident that when the lights go out our crews do as well – assessing the damage, developing a plan and getting the power back on as quickly as possible.







The VECustomers Share program funded \$30,100 in community service grants in August. Since the inception of the program in October 2001, more than \$6.1 million in grants has been awarded. The deadline for grant applications is the last working 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](http://www.vec.org).



VECustomers Share Board member Bobby Scott presents a grant check to Rev. Paul McKeehan of God's Helping Hand. This grant will be used by the organization to build wheel chair ramps and do house repairs for families in need.

**Organizations receiving grants in August**

American Cancer Society - McMinn County	\$500	5 Loaves Food Pantry	\$500
McMinn County Rescue Squad	\$1,000	Town of Byrdstown 5K Committee	\$1,800
McMinn County Educational and Community Foundation (MCEF)	\$1,000	The Bay View Arabian Team	\$300
Creative Story Project	\$400	Ronald McDonald House Charities of Greater Chattanooga	\$750
Pirate Springs	\$500	Maple Grove Community Senior Adults	\$1,450
Junior Achievement of the Ocoee Region	\$500	Pleasant Hill Historical Society of the Cumberland's (PHHS)	\$1,100
Monterey FBC (First Baptist Church) Community Fall Festival	\$1,500	Martin Elementary Junior Cross Country	\$1,250
CASA of Bradley and Polk County	\$600	Martin Elementary Junior Beta Club	\$1,300
Foundation House Ministries	\$750	Cumberland Homesteads Tower Association	\$1,350
American Cancer Society - Rhea County	\$1,000	American Cancer Society - Polk County	\$200
Rhea Alliance	\$1,750	Polk County Fair	\$300
Little Crab Lodge #614	\$914	Greasy Creek Food Bank	\$500
Handful of The Harvest	\$1,636	People Helping People Ministry	\$650
American Cancer Society - Loudon County	\$200	Polk County High Golf Booster Club	\$1,100
Lady Waves Soccer Club	\$500	American Cancer Society - Meigs County	\$200
Midway Middle School Beta Club	\$500	Meigs County FFA Alumni	\$500
Midway Youth Development Organization	\$1,300	Meigs High Golf Boosters	\$500
Monterey High School Cheerleading Booster Club	\$250	Meigs Middle and High School Concert Choir Booster Club	\$500
Wilson Athletic Booster Club	\$250	Meigs County Retired Teachers	\$800

**2017 4-H Electric Camp 'Plugged in the Future'**

Volunteer Energy Cooperative (VEC) sent a group of rising seventh- and eighth-grade students to 4-H Electric Camp June 27-30 on the University of Tennessee Knoxville campus. VEC's campers joined hundreds of other students from across the state in discovering the world of electricity by participating in various camp learning centers that provided activities where 4-H'ers were able to "learn by doing." Here are features of his year's learning centers:

**Wiring an Extension Cord** — This learning center taught basic wiring techniques that are used by electricians every day. Students demonstrated what they learned by wiring up extension cords with USB charging outlets.

**Home Energy Conservation** — We use electricity to light our homes, cook our food, play music and operate televisions. But as we use more electricity, our electric bills rise. In this activity, campers learned how conserving electricity in their homes not only helps to lower their electric bills but also helps to protect our environment and conserve resources.

**Green Energy Generation** — Green energy will play an important role in the supply of energy in the future. When green energy sources are used, the demand for fossil fuels is reduced. This learning center showed how the wind's energy can be harnessed to generate electricity.

**Electricity Party** — This learning center featured "hands-on" learning activities to increase the students' knowledge of Science, Technology, Engineering and Math (STEM) principles such as electromagnetism, alternating and direct current, electricity generation, electric circuits and other basic sciences.

**Electric Vehicles** — Campers learned about batteries as well as direct current and how it is used to propel electric vehicles. They also demonstrated their driving skills by maneuvering an electric golf cart through an obstacle course.

**Electrical Safety** — Though electric power does a tremendous amount of work for us, we must be careful around it because it is such a powerful force. This learning center taught campers how to play it safe around high-voltage power lines.

The 4-H Electric Camp is a joint venture of the Tennessee Electric Cooperative Association and its member cooperatives, including VEC; University of Tennessee Extension; Tennessee Municipal Electric Power Association and its municipal power systems; and the Tennessee Valley Authority.



**Understanding Electric Demand and How it Affects Your Bill**

Volunteer Energy Cooperative (VEC) residential accounts are not assessed a charge for electric demand. So you may think there's no need to understand demand, but do you ever look at your bill and wonder how the electric rates are determined? If your answer to that question is "yes," then you might be interested to learn how demand impacts your utility bills.

To start, it is important to understand how electricity is made and how it arrives at your home.

Before VEC can deliver electricity to the end user, that electricity needs to be generated. The Tennessee Valley Authority (TVA) produces all of the electricity consumed in our service area. Once the electricity has been generated, it travels over high-voltage transmission lines to substations, where the voltage is dropped to reduced levels. The electricity then travels over distribution power lines and finds its way into your home. So, while you pay VEC for the electricity you use, we don't actually generate the electricity.

We do play a big part in determining the amount of electricity TVA generates however. That is where the terms "consumption" and "demand" come in.

**Consumption** is the use of electrical energy, measured in kilowatt-hours (kWh).

**Demand** is the rate of electrical energy used per hour, or kilowatt-hours per hour, measured in kilowatts (kW).

A lightbulb "demands" a certain amount of wattage to function. A typical incandescent bulb may require 100 watts. If that lightbulb stays on for 10 hours, it consumes 1 kilowatt-hour (remember that 1,000 watt-hours equal 1 kilowatt-hour). Now, if you turn on ten 100 watt lightbulbs in your home for one hour, you will still consume the same amount of energy, 1kWh. However, you are placing a burden on the utility to have those kilowatt-hours available to you over the course of one hour instead of ten. This requires the generation plant to produce more power in less time in order to meet your demand, which results in a greater expense to the plant.

VEC purchases kilowatt-hours from TVA based on the total need of our members. Peak demand refers to the time of day when the demand for electricity is at its highest. This is typically during the evening when families return home from work or school, cook dinner and use appliances the most. Using electricity during this peak demand period costs VEC a maximum amount, because the cost of production is at its highest. This is why VEC may ask for your help from time to time. If we can minimize the cost of the electricity purchased during the peak demand period, it helps maintain our rates as low as possible.

Demand is the reason your electric bill fluctuates season to season and even year to year. Although you may not pay a charge for electrical demand, it plays a pivotal role in the cost of electricity. Generating and distributing power can be a tricky and complicated business, but rest assured VEC will always provide safe, reliable and affordable electricity to your family.



**Tennessee Valley Authority (TVA)**

Residential & Outdoor Lighting Fuel Cost Adjustment  
Effective September 1, 2017

**1.855¢**

For the most current FCA information, visit [www.vec.org](http://www.vec.org)  
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