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Learn How To ...**

Run for a CEC
Director's Seat

Follow the "Move Over
PA" Law

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2014 Photo Contest Entry
Photographed by Thomas Mitch of Butler

Missed Opportunity

by Matthew Boshaw, CEO & General Manager

Dr. Albert Einstein is, of course, world renown as a physicist and the creator of the "Theory of Relativity." Not as well-known is the fact that his college degree, before all of the doctorates, honorary and otherwise, was in electrical engineering. As you can imagine, all of us who have earned that degree have used this fact to end the constant argument about which engineering degree is the best. Not an argument for most people, I know, but we engineering geeks get into it more than you might think. There is a quotation I have often heard attributed to Albert Einstein, "If you can't explain it simply, you don't understand it well enough."

As I have said many times, Central Electric Cooperative (CEC) has many employees who are experts in their respective areas and, as such, are very good at explaining things simply for those

outside of our industry to understand. Perhaps the best example of that is our Residential Analyst and Advisor, Ken Maleski. As many of you are personally aware, Ken answers questions from our residential members on a wide variety of topics. People always leave with a better understanding of their concern than when they started. He does this professionally, courteously and without all of the jargon that is often used in our business. (See my October 2015 article, "Electricity as a Second Language.") I do my best to follow that lead, but occasionally stub my metaphorical toe.

One such stubbing happened at the 2015 CEC Annual Meeting, when I answered questions from members. I started by answering some questions that were submitted in advance. Then, members had the opportunity to step up to the microphone and ask more. I try to

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be very prepared for questions, and I have a good amount of industry knowledge. I discuss potential issues with staff and board members, and even pay close attention to the news leading up to the event. Last August, a member asked me what CEC is doing to prepare for a potential terrorist attack. Despite my preparation, I don't think I was ready for the question and didn't provide a very good, or complete, response. Given the continued escalation of terrorist-related events and increased public awareness and concern since that meeting, I believe you all deserve a more complete answer.

Nothing is 100 percent safe from the type of attacks that we hear about, but we have taken steps in many areas to lessen our risk. The nature of our work has us preparing for restoration of our systems, regardless of the cause of the disruption, but the intentional attack or destruction of facilities adds many concerns. A distribution system, by its nature, is spread out over many miles through varied terrain, and can therefore be difficult to protect. The electrical system and our facilities have physical security, alarms and surveillance devices to restrict unauthorized access and provide information in the event of an incident. While we are connected electrically to the larger grid, our computer systems are isolated from it.

Cyber security is constantly in the news and we take the threat very seriously. We are constantly reviewing our system. We have various levels of

protection in place to stop known threats and monitor to isolate and eliminate new threats as they arise. We work closely with our vendors to ensure their compliance with best security practices. We do intrusion testing regularly to identify potential areas needing of improvement. Our computer systems do not operate our grid, and therefore any breach would not impact our distribution system or provide access to the larger grid.

One of our biggest advantages, and potential disadvantages, is people. Sometimes those intent on doing harm attempt to use our helpful nature against us. With that in mind, we regularly train and test our personnel to help them remain vigilant and aware of potential threats. We inspect facilities before, and during, our various operations for our safety, public safety and equipment safety. We work with law enforcement and first responders to coordinate our efforts and minimize damage.

Perhaps our best defense is the very fact that we live in rural western Pennsylvania. The same reasons that cooperatives exist helps mitigate our risk. Our sparse population and challenging topography make it unprofitable for investor-owned utilities to supply this area. Similarly, those same conditions, coupled with our ability to be separate from the

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Matt Boshaw, CEO & general manager

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larger grid, make any such attack directed at us less impactful in terms of people and equipment, and therefore, less valuable to those with harmful intent.

With all of that in mind, I want you to know that your cooperative is aware of your concerns. Our preparation includes watching for the threat, defending against it and working to minimize any impacts that may result. No area or system is

exempt from the potential of some action by those who intend harm. I appreciate the opportunity to better respond to a member question, especially on such an important and timely topic. Hopefully I have done Dr. Einstein, and my fellow electrical engineers, proud and explained it simply enough to illustrate my understanding, and help yours.



A geothermal heat pump is the most efficient heating and cooling system available. They differ from an air-source heat pump because they use the earth as a medium to extract or discharge heat. Ground temperatures remain relatively constant at 4 feet below the surface, unlike changing air temperatures.

The two most common types of geothermal systems in our area are horizontal and vertical loop systems. Horizontal systems are constructed by digging 4- to 5-foot deep trenches that are about 100 feet or more in length. An average home usually requires four to six trenches. Vertical loop systems require drilling four to six wells to a depth of about 180 feet. A bentonite clay slurry is poured into each hole to provide proper earth contact with piping.

Geothermal heat pumps can save from \$3 to \$6 for every dollar spent on energy to heat, or are about twice as efficient as an air-source heat pump. Cooling savings are as little as one-third the cost of a central air conditioning system.

Geothermal Heat Pumps

Want more savings? Add a desuperheater to a geothermal system and receive free hot water during the summer cooling season. It simply moves all of your home's internal heat built up on a hot day to your water heater. On mild winter days when excess heating capacity is available, the desuperheater can provide domestic hot water at one-fifth the energy consumed by an electric water heater.

Geothermal systems now come with variable and two-stage compressor systems that increase comfort in all seasons. An added benefit is greater humidity control during summer cooling. Variable-speed compressors run quieter because system output more closely matches a home's heating and cooling requirements.

Geothermal systems do cost more to install than other heating systems. However, a 30 percent federal tax credit is available until Dec. 31, 2016, that will help make the installation a competitive choice. Now might be a good time to consider installing an energy-efficient and cost-saving geothermal heat pump.

**Sign up for weekly energy saving
"E-Tips" by contacting Ken at kmaleski@central.coop.**

Power Lines

“Move Over PA” Law Passes!

The new year brought new protection for line crews. On Nov. 4 Gov. Tom Wolf signed Senate Bill 765, the cooperative-supported “Move Over PA” law. This bill defines electric cooperative line personnel as emergency service responders and provides greater protection to cooperative and utility line workers as it requires vehicles to yield to line crews actively engaged in emergency repair work. The law applies when an emergency vehicle has its lights flashing and road crews have made an effort to warn motorists, i.e. lighted flares, posted signs, etc. It also gives line crews the ability to report violations and have citations issued to motorists when law enforcement is not present.

The bill was introduced by state Sen. Michele Brooks (R-Mercer) and unanimously approved by both houses of the Pennsylvania General Assembly. “Risking their safety, these men and women are out at all hours of the day and night in the worst of weather to ensure we receive services,” stated Brooks. “This legislation is one way we can help protect them.”

“Move Over PA” requires drivers approaching an emergency response area to pass in a lane not adjacent to that area, if possible. If impossible, drivers should pass the emergency response area at a careful and reduced speed.

Any person found in violation of this law could be found guilty of a summary offense and would have to pay a fine of up to \$250. These fines could double for other traffic violations occurring in the emergency response area. In addition, a 90-day license suspension will be added if the violation results in injury to the workers on the scene.

“Cooperative leaders worked closely with Sen. Brooks and a number of other legislators to get this important safety legislation passed,” stated Frank Betley, president & CEO of the Pennsylvania Rural Electric Association (PREA). “The enactment of this bill is a testament to not only the safety-first mindset of electric cooperatives and their concern for the safety of their line crews, but also the grassroots engagement and political activism of electric cooperative leaders around the state.”



Winter Weather Safety: Clearing Snow Safely

One thing most of us have to deal with each year, considering where we choose to live, is snow removal. Heart attacks, back strain and muscle soreness are just a few of the possible problems attributed to shoveling snow. Here are a few safety tips for removing snow safely.

- Dress in several layers so you can remove a layer as needed. Your body can heat up quickly doing manual work outside in the cold. You could end up dehydrated if you get too hot and start to sweat.
- Warm up your muscles before. Walking, marching in place, stretching, etc. can warm

your muscles so they work efficiently and make you less likely to get injured.

- While shoveling, stand with your feet hip width apart and keep shovel close to your body. Bend from the knees (not the back) and tighten your stomach muscles. Also try to push the snow, not lift it.
- Avoid twisting movements. If you need to move the snow to one side, reposition your feet to face the direction the snow needs to go.
- Most importantly, listen to your body. Stop if you feel pain and feel free to take breaks as needed.



Are You Interested in a CEC Director's Seat?

As a CEC member, you have a voice in who serves on our eight-member board of directors. Every year, members elect two directors for a four-year term. Director seats are divided among counties the cooperative serves. This year, resident members from Butler and Clarion counties are invited to run for these two respective seats. To be eligible for nomination you must be a CEC member in good standing, have a permanent residence in that county and meet other qualifications required by CEC's bylaws.

Please submit the coupon below by April 1, 2016 to receive a qualifications list and nominating petition. If you meet the qualifications, you will then send a written request, including your full name, address, telephone number, county of residence and account number, along with a completed petition signed by 20 cooperative members to the nominating committee by May 1, 2016.



After the cooperative confirms your eligibility, you will visit the CEC office to attend an orientation meeting and meet with the nominating committee for an interview. The committee then submits a list of the eligible candidates for placement on the ballot.

Nominee names, along with a photo and background information, are presented in the July issue of Power Lines. Cooperative members will vote by mail or internet prior to the Annual Meeting, or vote by paper ballot on the day of the meeting, Aug. 26, 2016, prior to the meeting's commencement. The final election results will be announced prior to adjournment.

Your board of directors has appointed a nominating committee to review prospective candidates interested in running for CEC director.

Committee members are:

Armstrong County

Harvey W. Loose
East Brady, Pa.

Forest County

Dennis Lamb
Tionesta, Pa.

Butler County

Donald F. Christy
Saxonburg, Pa.

Venango County

Carl E. Gadsby
Grove City, Pa.

Joe Gibson

Parker, Pa.

Ron Paranick

Cranberry, Pa.

Clarion County

James M. Reed
Fryburg, Pa.

Randy Tharan

Knox, Pa.

If you are interested in being considered as a director nominee, please complete this coupon and return it by April 1, 2016 to:
Central Electric Cooperative, Nominating Committee, 716 Route 368, PO Box 329, Parker, PA 16049-0329.

Please send me a qualification list and petition requirements for being a director nominee to Central Electric Cooperative's Board of Directors.

Name: _____

Address: _____

Telephone: _____

County: _____ Account: _____

Recipe of the Month

Peanut Butter Chocolate Eclair

Ingredients:

- 1 box chocolate graham crackers (or regular; will not use whole box)
- Two 3-ounce boxes vanilla instant pudding
- 1 cup peanut butter
- 3-1/2 cups milk
- 8 ounces whipped topping (Cool Whip®)
- One container chocolate frosting

Directions: Spray 9 x 13 pan. Line pan with graham crackers. Mix pudding, milk, peanut butter for two minutes with mixer. Fold in whipped topping. Pour half of mixture on graham crackers. Layer graham crackers again and spread remaining mix. Layer crackers. Heat frosting 1 minute. Pour over graham crackers and refrigerate 12 hours.

Thank you to Arlene Texter for submitting this recipe!

Send in your recipes to be shared today!

Send Recipes to:

Renee Tritten at rtritten@central.coop or mail to CEC, 716 Route 368, PO Box 329, Parker, PA 16049

CEC Management Team

Matthew P. Boshaw
CEO, General Manager

Dennis W. Beggs
CFO, Director of Finance and Accounting

Christopher W. Kossman
Director of Information Technology

Stephanie Deal
Director of Human Resources

Christina J. O'Donnell
Director of Member and Community Relations

Lisa A. Hoover
Director of Member Services

Fred E. Terwilliger
Director of Engineering and Operations

Read Power Lines and Win!

Last Issue's Winner:

Peggy McElhinney of Harrisville

Last Issue's E-Winner:

Harold McNany of Emlenton

Read Power Lines and win! It's simple — you can win a \$25 credit on your monthly electric bill by completing and returning the quiz below. And you have a second chance at another \$25 bill credit by submitting a quiz online at www.central.coop.

If you do not have access to the Internet, indicate that on the quiz and we will also enter you in the online drawing. Just complete, clip and enclose the quiz and personal information below and return it with your monthly payment. For quiz rules visit www.central.coop.

1. True or False: Warming up your muscles before shoveling snow is important to making them work efficiently and lowering your chance of injury.

Answer: _____

2. True or False: Geothermal heat pumps are about twice as efficient as air-source heat pumps.

Answer: _____

3. True or False: Matt Boshaw answers members' questions at the CEC Annual Meeting.

Answer: _____

How are we doing? (no wrong answer)

Name: _____

Address: _____

Phone: _____ **Acct. #:** _____



Central Electric Cooperative

A Touchstone Energy® Cooperative

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