

WATTS Current

January 2019

For Our Members

Introducing New CEO

The Maquoketa Valley Electric Cooperative Board of Directors announces the appointment of Jeremy Richert as CEO/Executive Vice President, effective January 2, 2019.

Jeremy began employment with MVEC in 1998 as an engineering intern while attending Iowa State University. Upon graduation, Jeremy began full-time employment as the Distribution Engineer,



advancing to Director of Engineering, and then helped lead the Cooperative's fiber build-out as Vice President/COO-Fiber; he was appointed Vice President/COO in 2017. Jeremy holds a Bachelor of Science degree in Electrical Engineering and is a licensed professional engineer in the State of Iowa.

Jeremy Richert

Since joining MVEC, Jeremy has been involved with many projects that have helped improve the reliability of the distribution system while also preparing it for future growth. He played a role in expanding the Cooperative's use of technology that has allowed the Cooperative to operate in a more efficient manner and ultimately improve service reliability to our membership. Jeremy found his work on the MVlink project to be very rewarding as it has prepared our electric system for the future while also meeting a great need for our members by providing high speed internet service.

Jeremy is looking forward to working with the Cooperative's directors and employees to continue meeting the future needs of our members.

Jeremy, his wife Melanie, and their three children live in Marion. Jeremy is active in his community and his church and really enjoys volunteering his time to coach youth sports. His hobbies include spending time with family, supporting his sports teams, and traveling when time allows.

Please join us in congratulating Jeremy on this new position.

MVlink-Beyond Halfway

With just over two years of fiber construction behind us we have built nearly 1,350 miles. The typical pace for a construction project of this scope is around 300 miles per year. However in 2018, MVEC's team of contractors, consultants, and dedicated staff installed nearly 800 miles of fiber! We have over 8,300 pieces of electric line equipment now using the fiber network to return data to the office and 17 of our 37 electrical substations are connected. We utilize two interconnected fiber hubs to ensure service redundancy. *Continued on Page 2*

Not My Mother's Soap

"I like making soaps that meet the specific needs of every body."

Lorna Jerred, Anamosa
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If your electric blanket has seen its better days, especially if it's a decade old or more, it's time to discard and replace with a new one.

Safety MATTERS

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MVlink-Beyond Halfway

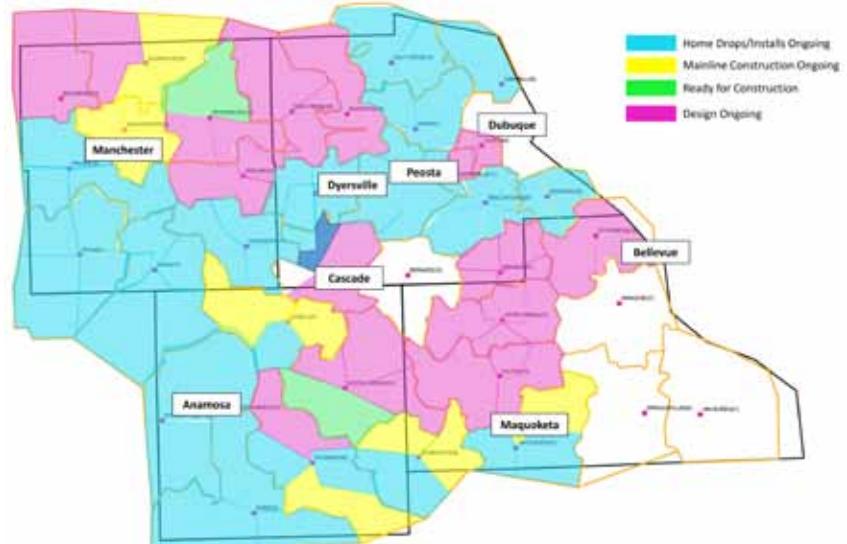
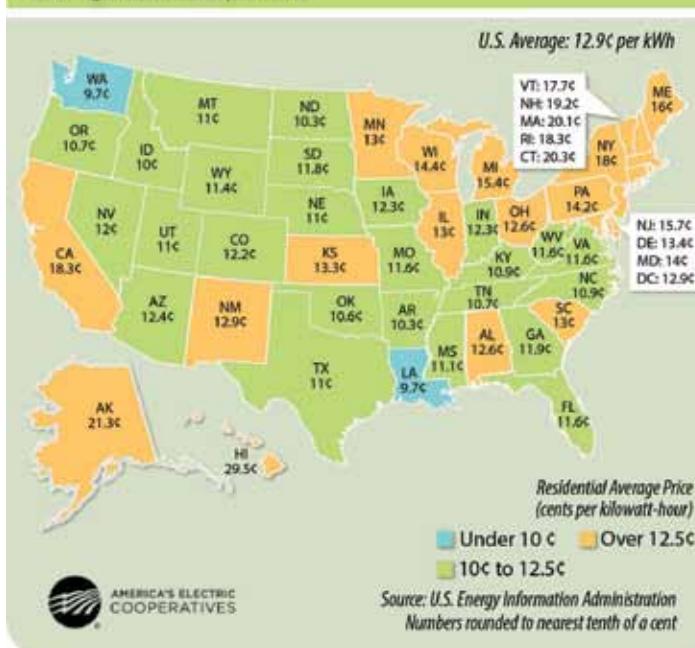
Continued from front page

Our design consultants have completed initial design for nearly 84% of the overall network. Our construction contractors and MVEC staff have 43% of the network currently operational with another 11% under construction. We are on track to complete the majority of construction by the end of 2019, weather permitting. We continue to evaluate options to serve others who are not our Cooperative members, including small towns who have asked, as we recognize the great need for rural Iowans to be connected.

Almost 2,500 people have expressed interest in MVlink when we reach their area and we are just shy of 2,000 homes experiencing symmetrical speeds of 50 mbps or greater. Approximately 30% of our MVlink members choose 100 mbps or 1 gig packages, while the other 70% choose the 50 mbps base package. We have received strong testimonials about the service our members are receiving. Allowing members to work from home, facilitating education when projects can be uploaded and downloaded quickly, and witnessing the expansion of smart homes truly boosts our rural economy just as electricity did in the 1930's.

Average Prices for Residential Electricity

2017 figures, in cents per kWh



While the winter months mean a slower construction season, we will continue to install drop connections on individual homes and businesses that don't require underground work, and home installs will continue to be scheduled. We will operate full steam ahead in 2019 as we work to close the gap between interested versus installed members.

We invite you to share your connectivity experiences with your neighbors and encourage them to give MVlink a try. The Cooperative business model, members helping members, is what built an affordable and reliable electric cooperative and we believe together we can also connect rural Eastern Iowa with MVlink.

Pull the Plug

Do you have old appliances no longer in use and taking up space? We can help you recycle them! The Pull the Plug program pays you for saving energy responsibly. Sign up today by calling our recycling contractor, CLEAResult, at 855-838-7817 (toll-free). Please have your account number handy as you will be asked to provide it. Appliances in ***working condition (runs and cools)*** will qualify for the following rewards:



Refrigerator: \$35 Freezer: \$25 Window AC: \$25
(Limited to three appliances per year.)



USDA Visits MVEC

Recently, MVEC was pleased to host Anne Hazlett, Assistant to the Secretary for USDA Rural Development and Grant Menke, Iowa's USDA State Director for Rural Development. We shared with them how valuable MVlink's fiber internet service will be towards connecting rural Iowa. Ms. Hazlett was also interviewed on WMT's 'The Big Show' and referenced how MVEC's broadband effort can help close the digital divide.

The Cooperative appreciates Ms. Hazlett's responsiveness to some of the issues we addressed.



L to R: Grant Menke, Kelly Gibbs, Jim Lauzon, Anne Hazlett, Jeremy Richert, Pat Bormann, and Patty Manuel.

2019 Energy Efficiency Incentives

Minor changes were made to our energy efficiency incentives for 2019. A few of those changes are slight increases or decreases in the dollar amount of some incentives. All incentives and application forms are available on our website at www.mvec.coop/rebates.

As a reminder, all 2018 forms are due back to our office by January 31, 2019.

Watts Current by Email
If you would prefer to have the Watts Current emailed to you, please sign up by sending an email to erobertson@mvec.coop

Trees, Underbrush, and Reliable Service

Tree trimming around power lines helps keep people safe and can increase the reliability of service when storms hit.

To provide electric reliability and personal safety, it is important that crews working for Maquoketa Valley Electric Cooperative periodically trim trees and underbrush around power lines in your neighborhood. Tree limbs and power lines are a bad combination, especially with storms involving high winds, lightning or ice. Trees are one of the most common causes of electric service outages and



Clearing underbrush is equally important for efficient power restoration when power lines are on the ground.

time spent clearing trees from power lines can result in extended periods of outage time. Clearing underbrush is equally important for efficient power restoration when power lines are on the ground.

Tree limbs and branches that extend into power lines can also pose a significant risk to public safety during any kind of weather. Anyone in close contact or trying to trim or climb such trees could be seriously injured.

Trained crews usually trim trees and underbrush around primary transmission and distribution lines every few years. Franchise and easement agreements with cooperative members allow us to trim affected areas on private property. Many factors are considered when trimming, such as the effect of ice on the limbs, how fast-growing the tree or underbrush is, and how many repeat trips will be needed. Fast-growing trees may need to be trimmed back more than slow-growing trees. The goal is to trim no more than what is necessary (generally 20 feet on either side of the power line) for public safety and electric service reliability. The Cooperative focuses on the electric line and does not trim branches that extend over homes or buildings. Trimming a tree near a power line will require a professional tree trimmer and you should contact MVEC at 800-927-6068.



Home Automation Provides More Control for Consumers

By Derrill Holly, NRECA

Home automation systems are placing the powers of control in the hands of cooperative members, but many questions remain about the best ways to use them to save money and energy.

“Most smart home technology is about comfort and convenience. Consumers interested in saving money on monthly energy purchases should look at internet-connected thermostats first,” said Brian Sloboda, program and product line manager for the National Rural Electric Cooperative Association (NRECA).

“Around half of all thermostats sold today are smart thermostats. These devices can learn your preferences and adjust the thermostat when you are not home,” Sloboda said. “These devices have the potential to reduce air conditioning energy consumption by 10%. During winter months, the thermostats could save 7% on energy used to heat the home.”

Sloboda has watched home automation systems evolve over the years. He is particularly interested in identifying ways to enhance efficiency and potential savings for cooperative members. “Laundry, dishwashing and water heating can be set to occur outside of your cooperative’s peak demand periods.” (MVEC’s peak hours are 4 p.m. to 9 p.m. daily.)

NRECA is currently working with one of the Department of Energy’s national laboratories on a demonstration project examining energy-saving options that could time shift some activities, but actual cost savings for the consumer is likely to be limited.

“Pool pumps, dishwashers, thermostats, and car chargers can learn their owners’ behavior and then communicate with the utility, so the data can be used for demand response,” Sloboda said. “The goal of the work by the lab is to determine if a system like this can be implemented without inconveniencing the consumer, providing energy demand savings to the utility.”

Finding Value in Energy Savings

Security system notifications and thermostat controls that adapt to home automation are among the most popular options available. But some consumers are



tackling other tasks in ways that actually could help them save or manage energy use effectively.

“There are different kinds of smart when it comes to smart appliances and devices,” said Peter May-Ostendorp, principal researcher at Xergy Consulting, which specializes in emerging technologies for energy savings in buildings, including homes.

“For some, smart simply means ‘we connected this thing to the network,’ which adds minimal value to the consumer,” said May-Ostendorp, who also is an energy technology consultant to NRECA. “In other products, smart means that there is some intelligence either built into the product or connected via the cloud that enables a taste of artificial intelligence.”

But not every product using artificial intelligence is designed to save energy. In many instances, energy use is secondary to convenience or connectivity features.

Making Connections

“Most smart devices have nothing to do with energy use, grid management or other resource conservation, like saving water,” said May-Ostendorp. “Generally, the benefits—dollar savings to the consumer—have not been proven, with the exception of smart thermostats, grid-connected water heaters and similar devices.”

According to the Environmental Protection Agency (EPA), interest in connected or smart appliances is trending upward among consumers, and manufacturers are responding with a growing list of products.

“If you are thinking of purchasing a smart appliance or thermostat, look for one that is ENERGY STAR®-certified with connected functionality,” wrote EPA officials asked about the technology. “Those that meet our criteria are designed to encourage interoperability and offer the following features: low energy use, energy use reporting and consumer ownership of all data.”

Besides smart thermostats, the products available now include, room air conditioners, refrigerators and freezers, laundry equipment, light bulbs and fixtures, and power strips.

- 4 “While owning a smart product doesn’t automatically



save you energy, if YOU are smart about using them, they can make a significant difference in your home,” wrote the EPA. That means making the investment payoff could take a few lifestyle changes. But dashboards, accessible from computers or tablets, and apps available for smartphones can help.

“I don’t think many people want infinite control over dozens of appliances and systems in their homes,” said Spencer Sator, president and CEO of Crimson Consulting, another NRECA energy efficiency advisor. “What we really want is ‘set it and forget it,’ features that we don’t have to actively manage,” said Sator. “The best devices get installed, adjusted and the consumer can walk away and still potentially save some energy.”

According to Sator, consumers are looking for simplicity. That’s feeding the popularity of virtual assistant technologies, like Amazon’s Alexa and Echo, Google Assistant, and Apple HomeKit. Other companies, including Samsung, Logitech, and Wink are also offering home-management hubs and platforms designed to help manage connected technology.

Convenience and programming simplicity are among the most important factors fueling consumer acceptance of what Sator describes as “home ecosystem” products. Home security controls, including locks, alarm systems and lighting are also popular features.

“We’re seeing adoption of the technology not necessarily for energy-saving reasons, but for life-enhancing applications, including some that help elderly consumers maintain independence in their homes,” Sator said.

Energy advisors agree that controlling devices from various manufacturers that perform different functions with a single system enhances the value of home automation systems.

Command and Control

The challenges for consumers are deciding which features meet their expectations and justify the added investment in automation, and how well various products work together under management of a particular hub device or app.

“This is still the Wild West, from a technology value perspective,” said Sator. “When you consider available options and actual performance of the devices available, some gadgets perform well and can save consumers money and energy, while others don’t measure up to the hype.”

With more than 900 manufacturers marketing about 4,100 connected devices, voice command technology is seen as one way to avoid collections of various

remotes that typically wind up cast aside in favor of multifunction control devices.

“The Jetsons-like experience—where your Fitbit recognizes you’re awake, tells the coffee to brew, queues up your morning news on a smart speaker, ramps up the heating setpoint—isn’t really happening,” said Xergy Consulting’s May-Ostendorp. “People have thought that Alexa or Google Home might

be the answer, but do we all really want to talk to our home, Star Trek style, to accomplish basic tasks?”

In fact, smart speaker technology is primarily used to answer questions, check the weather, get news updates or play music. According to a survey conducted in five major industrialized nations, including the United States, 65% of those asked cited those functions, while only six percent reported using the technology to control lighting, televisions or other connected devices.

“No one wants a hodge-podge of technologies that can’t communicate with each other,” said Crimson Consulting’s Sator, adding that the necessary hubs and powered interfaces to connect the devices could actually boost overall energy use. “The technology isn’t very smart if devices can’t work together.”

Derrill Holly writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association, the national trade association representing more than 900 local electric cooperatives. From growing suburbs to remote farming communities, electric co-ops serve as engines of economic development for 42 million Americans across 56 percent of the nation's landscape.



Not My Mother's Soap

Grace Zimmerman, Anamosa, Iowa

Made my first correct decision as I turned left off of Highway 151 onto Basham Lane southwest of Anamosa, where I made my way to the home of Lorna Jerred and Soaps for Everybody. As Lorna greeted me, I informed her I was asking my usual first question as to how she became interested in making handmade soaps. She



Lorna Jerred

replied, "I started a little over five years ago when I was visiting my nieces and we were attending a garage sale. I spoke to a woman who had been making soaps. I initially had some failures, but I progressed and gave them to my family and friends. I also sold them at farmers markets in Anamosa, Cedar Rapids, and Iowa City. I use wild sage, mint from Egypt, jojoba oil from France, and emu oil that I purchased when I was in Australia. I wasn't selling enough at summer events to cover vending fees, so eventually I decided to sell only at fall events and through shops in Iowa City and Mt. Vernon. My most popular items are soaps I specifically make to help skin impacted by psoriasis and eczema.

I also make bath bombs and shampoo bars with added herbs."



One of the varieties of soap the Lorna makes named Vacation at the Beach.

As we visited more, Lorna added, "Now I make 63

varieties of soaps, numerous bars that can help sensitive skin, and 10 varieties of lip balm." Here she stops to open a wide expanse of cupboards with shelves exhibiting all the flavors of more than 100 jars. Lorna then explained, "I use the cold process,

which takes longer than the hot process, but I've learned it produces the highest quality of soaps which makes me proud of my finished product. After mixing and pouring the soap, I wait 24 hours and then use the cutter, which results in all bars being the same size. A six week cure (time to wait before using) is necessary for soaps to last longer." At this point, we made a trip to a large basement room that housed curing racks and dehumidifiers.



Lorna standing next to the curing racks for the soap.

In answer to my obvious question and remembering my mom making handmade soap, Lorna replies, "Yes, lye is the chief ingredient needed to make soap. The types of oils and fats that are used make a difference in how hard or soft the soap ends up



Lorna demonstrates how the cutter is used to make the bars of soap equal in size.

being, and how well it lathers."

Lorna states her philosophy is the reason for the success of her

soaps, which is, "I like making soaps that meet the specific needs of every body. Also, I do make soaps for the seasons. I see lots of demand for Halloween and Christmas motifs. I want to add that I deliver locally. Shipping is also an option, too."

By the way, Lorna's products can legally be referred to as 'soaps', while others are called 'detergent'! Lorna can be reached by calling 319-530-6302, or via email at lornajerred@gmail.com.



Portable Generator Safety

Portable generators can be helpful during an extended power outage. But if not operated properly, you can place yourself as well as line crews from your electric co-op at risk of injury or death.

First rule of thumb? Never, ever use a generator indoors—even with windows open—or in an enclosed area, including an attached garage. Locate the generator where fumes cannot filter into your home through windows or doors—even 15 feet is too close. Carbon monoxide, which is odorless and invisible, can build up to lethal levels in a matter of minutes. If you plan to use a generator, install a carbon monoxide detector, and test the batteries monthly.



Portable generators are helpful in an extended power outage, but they can create serious safety hazards if not used correctly.

To avoid risk of shock, use your generator only on a dry surface where rain or snow can't leak or puddle underneath. If precipitation poses a problem, create an open-air, tent-like structure above the unit, but make sure to leave at least 3 to 4 feet of space above and around it to vent carbon monoxide.

You also need to protect folks working to restore power. Never plug your portable generator into a wall outlet in your home. This produces “backfeeding”—a dangerous risk to the safety of lineworkers because it can energize power lines thought to be dead. For stationary generators that are permanently installed, a licensed electrician will need to install a “transfer switch” that complies with the *National Electric Code*. The switch safely cuts the electricity to the power lines. And be sure to call MVEC before you install a generator to ensure safety for yourself and lineworkers.

A few other rules are important to keep top of mind:

- Follow the manufacturer's instructions and safety tips for your generator.
- Plug appliances into the outlet on the generator using only heavy-duty extension cords marked specifically for outdoor use. Check the wattage use of each appliance plugged in and make sure the total does not exceed the cord's wattage rating. In addition, the cords should have three prongs and should not be frayed or cut.
- Shut down the generator and let it cool down before you refuel. Gasoline or kerosene spilled on a hot generator could start a fire.
- If you're buying your first portable generator, plan ahead. Count the wattages for the lighting and appliances. You'll want to purchase a generator that can handle the load.

Source: U.S. Consumer Product Safety Commission, American Red Cross, Electrical Safety Foundation International

Watts The Answer?

1. _____ are one of the most common causes of electric service outages.

2. Today, more than _____ smart devices are available to consumers.

3. Never use a _____ indoors.

Mail your answers in with your energy bill, or email them to erobertson@mvec.coop.

Two winners will each receive a \$10.00 credit on their energy bills.

Please complete the following:

Name _____

Address _____

October winners:

Peggy Cobb, Anamosa
Bob McCarthy, Peosta

November winners:

Kevin Schmerbach, La Motte
Dennis Wilcox, Baldwin



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