

WATTS Current

April 2024

Upcoming MVEC Director Elections

Did you know that as a member* of Maquoketa Valley Electric Cooperative you have the opportunity to serve on the Board of Directors? Since 1935, MVEC has been owned by its members and governed by a Board of Directors who are members themselves. The Board of Directors is responsible for representing the members and overseeing the company they own. Nine directors serve on the board, each for a three-year term. Each director is nominated by a nominating committee and elected by the Cooperative's members at the annual meeting (scheduled for Thursday, August 15, 2024, at the Peosta Community Centre).

MVEC's service territory is divided into four regions (visit our website for a map). Two directors represent each region and one director serves At-Large. This year, seats in the following regions are up for election: Region 1 (Jones County and portions of Linn and Cedar Counties); Region 3 (Dubuque County) and Region 4 (Delaware County and portions of Buchanan and Clayton Counties). To serve as a Director, an individual must be a member of the Cooperative and reside within the region they are elected to represent. Director candidates must not have been employed by the Cooperative in the previous two years or be closely related to an employee or incumbent director.

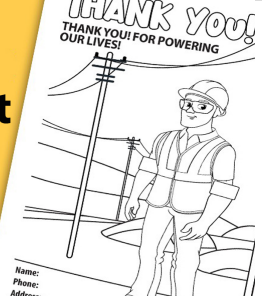
Directors must be willing to devote time and effort to attend and actively participate in monthly board meetings, training classes and/or meetings sponsored by Cooperative-affiliated organizations. Directors are encouraged to attain National Rural Electric Cooperative's (NRECA) Credentialed Cooperative Director and/or Board Leadership Certificate upon election to the Board. Look for more details on this year's director election in the May issue of Watts Current. If you are interested in learning more about the requirements for serving on the Board of Directors, please contact MVEC's office at 800-927-6068.

**Who is considered a member of the Cooperative? A member of Maquoketa Valley Electric Cooperative must be listed on the formal membership application filed with the co-op. To add a spouse to your membership, contact Erica at 800-927-6068. The Secretary of the Cooperative shall, at least 15 days prior to Annual Meeting, make a complete list of members entitled to vote.*

Lineworker Appreciation Coloring Contest

Entries are due by April 12th

Download the coloring sheet mvec.coop/coloring-contest



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Fast Facts About Lineworkers

You probably don't think about them until your power goes out, but electric and fiber lineworkers protect our homes and communities 24 hours a day. Lineworkers endure all kinds of weather and challenging conditions. Here are some quick facts.

What Electric and Fiber Lineworkers Do - Restoring electric or fiber services after an outage is just one of the many duties of lineworkers, who also:

- Install and connect new power and fiber lines to homes and businesses
- Maintain and perform upgrades to improve our electric grid
- Diagnose and pinpoint power and fiber delivery issues
- Plan and manage large-scale electric and fiber projects
- Ensure work is performed safely in all types of challenging conditions

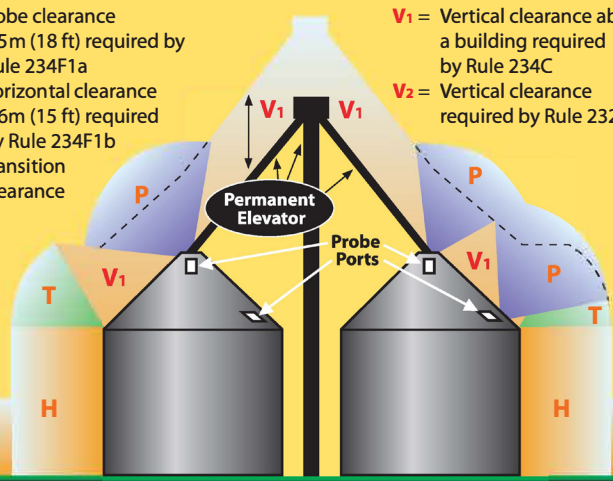
The next time you see a lineworker, thank them for the essential work they do.





Clearance envelope for grain bins filled by permanently installed augers, conveyors or elevators

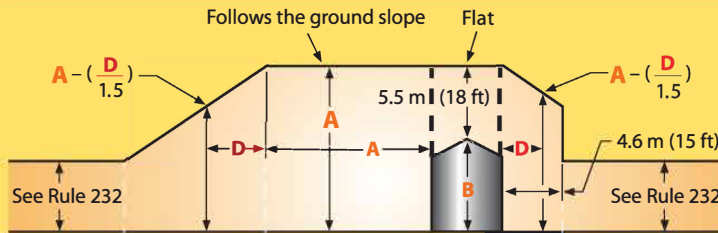
- P** = Probe clearance
5.5 m (18 ft) required by Rule 234F1a
- H** = Horizontal clearance
4.6 m (15 ft) required by Rule 234F1b
- T** = Transition clearance
- V₁** = Vertical clearance above a building required by Rule 234C
- V₂** = Vertical clearance required by Rule 232B



From IEEE Std. C2-2017, "National Electrical Safety Code." © Copyright 2016 by IEEE. All rights reserved.

Clearance envelope for grain bins filled by portable augers, conveyors or elevators

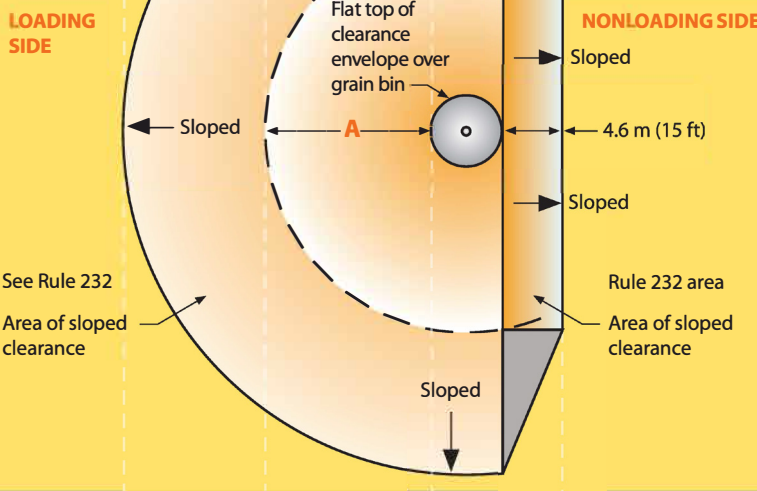
ELEVATION



- B** = Height of highest filling or probing port on grain bin
- A** = B + 5.5 m (18 ft)
- D** = Variable horizontal dimension

In the area of sloped clearance, the vertical clearance is reduced by 300mm (1 ft) for each additional 450mm (1.5 ft) of horizontal distance from the grain bin.

PLAN VIEW



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Disclaimer: These drawings are provided as part of Iowa electric cooperatives' annual public information campaign and are based on the 2017 Edition of the National Electrical Safety Code. To view the actual drawings, refer to that publication. Every care has been taken for the correctness of the contents for these drawings. However, the Iowa Association of Electric Cooperatives and its member cooperatives accept no liability whatsoever for omissions or errors, technical inaccuracies, typographical mistakes or damages of any kind arising from the use of the contents of these drawings, whether textual or graphical.

Maintain Proper Clearance Around Grain Bins

The State of Iowa requires specific clearances for electric lines around grain bins, with different standards for those filled by portable and permanent augers, conveyors and elevators.

If you are planning to construct a new grain bin (or move an existing one) please contact Maquoketa Valley Electric Cooperative. We will provide assistance in planning a safe environment for everyone working at, and living around, your grain bins.

Electric wires should be at least 15 feet from the non-loading side of the grain bin; at least 18 feet from the highest filling or probing port on the bin; and a clearance of at least the bin height plus 18 feet from the loading side of the grain bin. Electric service cannot be provided to a grain bin installation that does not meet these clearances.

According to the Iowa Electric Safety Code found in Iowa Administrative Code Chapter 199-25.2(3)b. *An electric utility may refuse to provide electric service to any grain bin built near an existing electric line which does not provide the clearances required by the American National Standards Institute (ANSI) C2-2017 "National Electrical Safety Code," Rule 234F. This paragraph "b" shall apply only to grain bins loaded by portable augers, conveyors or elevators and built after September 9, 1992, or to grain bins loaded by permanently installed augers, conveyors or elevator systems installed after December 24, 1997.* (As adopted by the Iowa Utilities Board.)

If the wires around your existing or proposed grain bin do not meet the requirements shown in the diagrams or if you have any questions, please contact our office at 800-927-6068.

Bylaws Available

Copies of the Bylaws of Maquoketa Valley Electric Cooperative are available on our website and at the Cooperative's office. If you would like a copy of the Bylaws, please pick one up, or contact us to have one mailed to you.



Safety Matters: Spring Safety Reminders

By Jenna Curtis, Safety Director

Spring is here and that means we are all ready to get out and start those clean-up and home improvement projects. And, for our farmers, spring planting will soon be underway. Please keep safety at the top of your checklist and take the following precautions this spring:

Call Before You Dig

Before you start those home improvement projects or spruce up your landscaping, make sure you call 811 before you dig--call at least 48-hours (not including weekends or holidays) in advance of your plans. It is free to call this service and you are required by law to do so. Digging into wires and lines is not only dangerous, it can be very costly. Call 811 or visit www.iowaonecall.com.

Move Over/Slow Down

As we are heading out on the road for family trips or working hard getting in the fields, make sure you watch for our crews (and other utility/DOT workers) and move over/slow down. Our employees deserve to be safe at work and get home to their families each night. It's not just a courtesy, it's the law.

Beautify Your Yard, Not Your Utility Equipment


Please don't attach items to power poles or plant trees, shrubs or landscaping near utility equipment. This can present a danger, impact reliability and impede power restoration.

Keep Your Distance While Spring Planting

Be mindful of the height and width of your equipment when you are doing work in the field this spring. As you enter and leave the field, keep these precautions in mind:

- Always use a spotter when operating machinery near lines.
- Use care when raising augers or the bed of grain trucks around power lines.
- Keep equipment at least 10 feet from lines at all times, in all directions.
- Inspect the height of farm equipment to determine clearance.
- Always lower extensions to the lowest setting when moving loads.
- Never attempt to move a power line out of the way or raise it for clearance.
- If a power line is sagging, call us right away. 800-927-6068
- If your equipment does hit a power line, do not leave the cab. Immediately call 9-1-1, warn others to stay away, and wait for the utility crew to cut the power.

At MVEC, safety is our priority. Thank you for doing your part to keep our employees, equipment, yourself and fellow members safe.



RECare

**You Care, We Care,
RECare,** a way for
members to help members

MVEC's RECare program allows members to contribute to a fund that assists low-income members with weatherization to help improve their heating and cooling costs or supplement energy assistance. Funds collected are distributed by local community action agencies.

Yes, I care and want to contribute.

I will make a one-time contribution to RECare. My check is closed.

I will contribute \$_____ per month to RECare.

I understand that this amount will be automatically added to my monthly electric bill. (Even one dollar shows you care.) Monthly pledges may be cancelled at any time by notifying MVEC in writing.

Name: _____

Address: _____


City: _____

State: _____ Zip: _____

Account Number: _____

Email: _____

Please mail to MVEC or include with your electric bill payment.



**Maquoketa Valley
Electric Cooperative**

109 N. Huber Street, Anamosa IA 52205



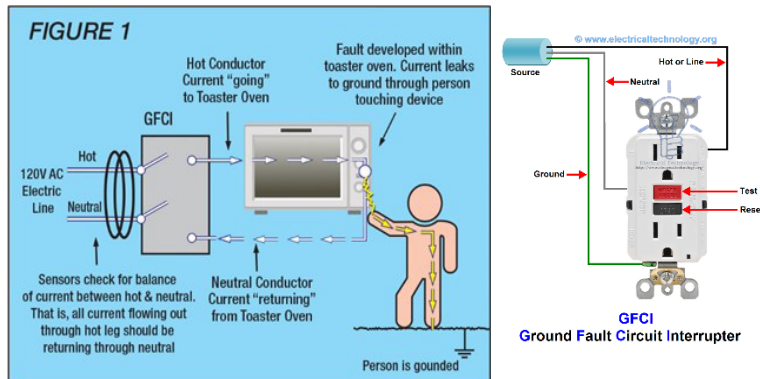
Our Energy Working For You: GFCI and AFCI Increase Electrical Safety

By Al Reiter, Energy Advisor

Following up to a previous article on smoke detectors in your home (December 2023 Watts Current), in this article, we are focusing on a group of protective devices that have improved safety for decades. Ground Fault Circuit Interrupters and more recently, Arc Fault Circuit Interrupters, are required in more and more areas in a home or business. To better understand how they work, let's take a look at each option.

Ground Fault Circuit Interrupters (GFCI)

Since 1971, GFCI have been required to be used in new homes where electric receptacles and water are present, like bathrooms and outdoor outlets. The way a GFCI works is by comparing the flow of electric current (Amps) going out on a circuit and returning, which during normal conditions should be identical. If the current flow doesn't equal, it has found a path that it shouldn't travel through, say a person, and a difference of 6 milliamps (.006) or more, will trip the circuit and shut off. Normally, 10 milliamps or above can cause a severe shock to a person. Considering a normal 20 Amp circuit in a home can carry 2,000 times that, these devices operate at a very low threshold of current.



While these devices have saved lives and have prevented property damage, they can cause nuisance tripping that can be, well, a real nuisance. For example on a GFCI, an extended period of rainy weather can cause a GFCI protected outlet on an outside receptacle to trip. While the GFCI is performing as it should, it takes a very small current to trip it.

Arc Fault Circuit Interrupters (AFCI)

Since 1999, AFCI have been required in certain areas in a new home or addition. The primary purpose of the AFCI is to look at the waveform of the electric flow in

a circuit and if a specific waveform associated with a damaging electrical arc occurs, it disconnects the circuit. These damaging arcs can be caused by a loose connection or breakdown of insulation protecting the wire or equipment. The AFCI can prevent fires and property damage. But because switching power on or off normally produces a momentary arc, nuisance tripping can occur (for example to something like your vacuum cleaner). Manufacturers are working to improve these devices to better distinguish an acceptable arc from a hazardous arc.



Combination GFCI/AFCI circuit breaker

Are these safety devices worth it? With a combination GFCI/AFCI breaker costing approximately 10 times what a regular circuit breaker does, it does add up in a typical home. Similar to smoke detectors, they don't always operate unnoticed in the background, but the benefits of reduced loss of life or fires far outweigh the cost or inconvenience.

Heat Plus Rate Reminder

The Heat Plus rate ends with energy used through May 31, 2024. It is important that you do not turn off power to these meters because the Cooperative still needs to be able to read them each month. The Heat Plus rate will begin again October 1, 2024.

Pull The Plug

Do you have old appliances taking up space? Get rid of that old refrigerator, freezer or window air conditioner and get paid through MVEC's Pull The Plug program.

Sign up today by calling our recycling contractor, CLEAResult, at 855-838-7817 (toll-free).

Please have your account number as you will be asked to provide it. Appliances in *working condition (run and cool)* will qualify for the rewards to the right.

(Limited to three appliances per year.)





Pull the Plug...and then what?

By Christie Remley, Manager of Communications and Public Relations

Many MVEC members participate in the Pull the Plug appliance recycling program each year. But, have you ever wondered what happens to your old appliances once they are picked up? MVEC partners with a company by the name of CLEAResult to pick up and recycle members' old appliances. Recently, Energy Advisor Al Reiter and I toured CLEAResult's recycling facility in Marion, Iowa, to learn more about their process.



The Pull the Plug program includes window air conditioners, refrigerators and chest freezers. The fridges and freezers must be standard size, between 10 and 30 cubic feet. All appliances must be in working and cooling condition. An MVEC member initiates the process with CLEAResult either by calling to schedule a pickup (855-838-7817) or by using our new online request form found at mvec.coop/appliance-recycling-form. CLEAResult will then schedule a pickup date with the member. Typically most appliances are picked up in one to two weeks.

When the driver arrives to collect the item, please make sure there is a clear path and have the appliance clean and emptied of contents. They will confirm the member's MVEC account information, provide them with a check (yes, that's right—we pay members to recycle their appliances!) and load up the appliance at no cost to the member. Why does MVEC offer the Pull the Plug program? Primarily, it is an incentive for members to remove inefficient appliances from the electric grid in favor of newer, more efficient appliances.

But, what happens after they have hauled the appliance away?

This is where the second benefit of the Pull the Plug program comes in. MVEC member appliances are taken to CLEAResult's Marion recycling facility. No appliances are refurbished or re-sold, all are recycled. The team at CLEAResult goes about the task of tearing apart and demanufacturing each appliance according to all

state and federal regulations. All hazardous materials such as refrigerant, capacitors and mercury switches are removed, and materials are sorted out. For example, with refrigerators, CLEAResult removes ½ pound of refrigerant from each fridge which takes anywhere from 5 to 10 minutes to complete. They then remove the doors, recycle any glass shelving, remove compressors and mercury switches.

CLEAResult then ships all the usable metals and components to local scrap or materials vendors to be turned into new items. Hazardous materials are collected and shipped to an approved EPA waste facility to be properly disposed of.



While the work is not glamorous, it is worthwhile. The facility has three lines and various stations where the team can decommission up to three refrigerators at a time.

Calvin Ehltz, Plant Manager, CLEAResult, estimates that it takes about an hour per appliance to decommission (including pickup time). "We have a defined process that we go through where each appliance has a de-manufacturing mark, which is tied to a specific CLEAResult technician, and that is registered with the state. We take our work seriously and are proud to do our part to help protect our environment."

We can attest to the volume of appliances that CLEAResult recycles as on our tour, we saw a mammoth 40,000 pound bail of crushed appliances that had been decommissioned.

MVEC's Pull the Plug program is a win for members and a win for the environment!



TECH LINK

Benefits of a Mesh Unit/Extender from MVlink

Our customer support team has been fielding calls from members experiencing issues with third-party extenders. Below is some information on extenders, issues they may cause and benefits of using an extender provided by MVlink.

What about other mesh units or extenders from third-parties (not MVlink)?

It is optimal for MVlink members to use routers and mesh units from MVlink for a variety of reasons. If members use a third-party extender, they may experience the following issues:

- Devices may connect, but can't get to the internet. "Connected, no internet"
- Devices may experience interruption in service when switching from MVlink router to the extender as member moves throughout the house.
 - Videos may pause/buffer on mobile devices
 - Wi-Fi calls/video conference calls may drop
 - Downloads might fail or be interrupted
- The MVlink support team loses the ability to support and troubleshoot any devices that are connected to the extender. MVlink cannot help solve any issues with devices that connect to the third-party extender since MVlink techs cannot see signal strength, etc.
- Extenders advertise their own distinct Wi-Fi network name (SSID). For seamless connection, the member would need to add devices to more than one network in the house as a result.
- Member must configure and install extender themselves.



Examples of third-party extender devices that may cause these issues?

- Netgear extenders
- TP-Link extenders
- Linksys extenders
- Old Wi-Fi routers that are misconfigured attempting to be used as an extender



MVlink's mesh unit:

- Made by the same manufacturer as MVlink routers, so they are compatible
- Same Wi-Fi network name (SSID) as the router. Member does not need to add devices to different networks.
- Seamlessly passes a device between router and mesh unit as device moves throughout the house, reducing service interruptions.
- Enables MVlink support to "see" and help with issues that may be occurring with devices that connect to the mesh unit.
- Is professionally installed by one of MVlink's field technicians to ensure the optimal placement for the best coverage in the house.

Building a Shop or Man-Cave This Spring?

Now that spring is arriving, many members are putting up pole buildings or shops on their properties. One of the common inquiries that our Fiber department fields is how to get fiber internet service to these new additions especially if they are a good distance from the main house and/or have metal siding. If this is the case, a member should plan on trenching in a **CAT 5** or **CAT 6** cable wired solution between the house and the new structure, preferably in conduit. You will need to hire a contractor to do this work as this is not part of the MVlink service. And then, don't forget to contact MVEC for your wireless router or mesh unit needs.

FREE Event
Join Us!

OPEN HOUSE

Come learn about MVEC's High-Speed Fiber Internet

Tuesday April 30th 5pm-6:30 pm

Community Savings Bank

221 E Main St, Manchester

Drawing for \$50 Gas Cards





Winter Moratorium Ends April 1

Iowa’s annual winter home heating moratorium ends April 1, 2024. The Iowa Utilities Board (IUB) reminds energy assistance customers currently protected from service disconnection through the Low-Income Home Energy Assistance Program (LIHEAP), to contact their local utility company immediately to discuss payment options and avoid disconnection.

LIHEAP is a federally funded program administered by the Iowa Department of Human Rights, Division of Community Action Agencies, and is designed to assist qualified homeowners and renters pay a portion of their primary home heating costs through a one-time payment made directly to the utility or heating fuel vendor. Under Iowa’s winter moratorium law, customers who qualify for LIHEAP or the federal Weatherization Assistance Program are protected from the shutoff of natural gas or electric service annually from November 1 to April 1.

The end of winter moratorium period can be stressful. Please remember:

- Consumers can still apply for LIHEAP through April 30, 2024.
- Visit mvec.coop/iowa-liheap-guidelines for local community action agencies.
- www.211iowa.org is a resource for assistance with utility payments.

Watt’s Up: Maintenance at Your Co-Op

This month’s department update is from MVEC Operations Director, Dan Schulte.

Spring is here and with the warmer weather, comes maintenance work at your coop. Maintenance is an important investment at MVEC—it ensures that we are able to continue to provide you with reliable and safe electricity as well as reliable fiber internet. Maintenance extends to all areas of the cooperative—from our facilities to our fleet and obviously to our electric and fiber plant (assets used to distribute power and internet to members). Each year, plant maintenance activities account for approximately 25% of the Cooperative’s non power supply operating expenses. Below are just a few of the key types of maintenance we are currently performing at MVEC:

Pole Testing: MVEC has subcontracted with Badgerland Utility Solutions, LLC from Wisconsin, to inspect power poles (which are on a 10-year inspection cycle) and underground utilities throughout MVEC’s service territory. So far this year, 5,030 poles have been tested. Pole testing and utility inspection helps to ensure the distribution equipment is safe and reliable.

Detail Line Inspection: MVEC’s power line system is on a 7-year inspection cycle, meaning MVEC linemen perform detailed line inspections on five substations each year (we inspect each structure, one by one) to make repairs and upgrades.

Vegetation Management: This time of year, you will see our crews (and, in some cases, our contractors) trimming trees and conducting vegetation management throughout our service area. Tree trimming around power lines helps keep people safe and can increase the reliability of service when storms hit. Trees are one of the most common causes of electric service outages and time spent clearing trees from power lines can result in extended periods of outage time. Clearing underbrush is equally important for efficient power restoral when power lines are on the ground.



Watts The Answer?

1. A _____ of Maquoketa Valley Electric Cooperative must be listed on the formal membership application filed with the co-op.
2. It is _____ for MVlink members to use routers and mesh units from MVlink for a variety of reasons.
3. _____ is an important investment at MVEC—it ensures that we are able to continue to provide you with reliable and safe electricity as well as reliable fiber internet.

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

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

Please complete the following:

Name

Address

February winners:

Rose Hanson, Greeley

Kenneth Faust, Strawberry Point



Maquoketa Valley
Electric Cooperative
109 North Huber Street
Anamosa, Iowa 52205

PRSRT STD
U.S. POSTAGE
PAID
Cedar Rapids, IA
Permit 174

SUMMER OFFICE HOURS

MVEC will observe summer hours

**April 29th to
September 27th**



Monday-Thursday: 7:00 AM - 4:30 PM

Friday: 7:00 AM - 11:00 AM

ENERGY EFFICIENCY TIP OF THE MONTH

A well-designed landscape can add beauty to your home and reduce home heating and cooling costs. Plant deciduous trees with high, spreading crowns to the south of your home to block sunlight in the summer and reduce the need for air conditioning. Deciduous trees lose their leaves in the winter, allowing sunlight to warm your home.

Plant evergreen trees and shrubs with low crowns to block winter winds. Dense evergreen trees and shrubs planted to the north and northwest are the most common type of windbreak and can help lower energy used for home heating.

Source: energystar.gov



Understanding Your Electric Bill

ON-PEAK hours are 4 p.m. - 9 p.m.

OFF-PEAK hours are
Midnight - 4 p.m. and 9 p.m. - Midnight

These times are in effect every day.

Watts Current

is published monthly for members of Maquoketa Valley Electric Cooperative.

A Touchstone Energy® Cooperative

Mailing Address:

109 North Huber Street • Anamosa, IA 52205
319-462-3542 or 800-927-6068

Office Hours:

Monday-Friday • 7:30 a.m. to 4:00 p.m.

After Hours Call Center: 800-582-8998

www.mvec.coop

Email direct to the following departments:

Electric Billing: billing@mvec.coop

Electric Service: maintenance@mvec.coop

Internet/Phone Service: fiber@mvec.coop

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Printed by Julin Printing Company
Monticello, IA

