Clark Electric Cooperative
Your Touchstone Energy® Partner

OCTOBER IS CO-OP MONTH

Tim Stewart,
CEO/Manager

October is National Cooperative Month. This is the month during which Americans celebrate cooperatives to raise awareness about the many benefits that cooperatives bring to our communities.

Cooperatives exist in many forms and deliver a host of products and services such as financial services, grocery/food, dairy, grain, and of course energy. As I was preparing for this month's article, I thought you might be interested in how the cooperative business model started.

According to an article in the September 2013 issue of *Rural Electric*, the cooperative movement we know today traces its roots to a set of business guidelines drawn up by Charles Howarth, one of 28 weavers and artisans who founded the Rochdale Society of Equitable Pioneers in Rochdale, England, on December 21, 1844. The tradesmen had banded together to open a store selling food items they could not otherwise afford, starting out with a meager selection of butter, sugar, flour, oatmeal, and a few candles but soon expanding to include tea and tobacco. Eventually, the enterprise was so successful the group was able to open a cooperative factory and textile mill.

The Rochdale Pioneers
(CORBIS)

When introduced in the United States by the National Grange in 1874, these "Rochdale Principles" fueled a cooperative explosion. After being formally written down by the International Cooperative Alliance (ICA) in 1937 (and last updated in 1995), they evolved into the seven cooperative principles used today. Although stated in many ways, the seven cooperative principles hold that a cooperative must provide:

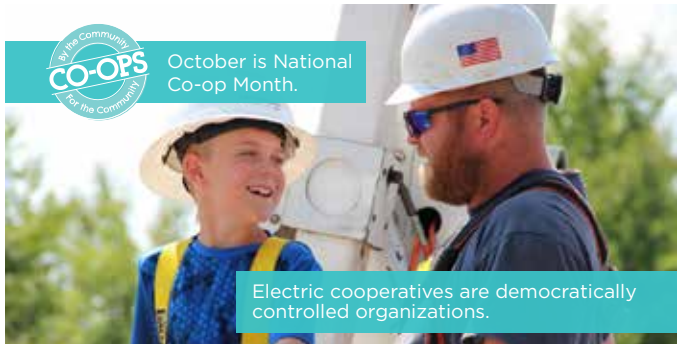
1. **Voluntary and Open Membership:** Cooperatives are voluntary organizations, open to all persons able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political, or religious discrimination.
2. **Democratic Member Control:** Cooperatives are democratic organizations controlled by their members, who actively participate in setting policies and making decisions. The elected representatives are accountable to the membership.
3. **Members Economic Participation:** Members contribute equitably to, and democratically control, the capital of their cooperative. At least part of that capital is usually the common property of the cooperative.
4. **Autonomy and Independence:** Cooperatives are autonomous, self-help organizations controlled by their members.
5. **Education, Training, and Information:** Cooperatives provide education and training for their members, elected representatives, managers, and employees so they can contribute effectively to the development of their cooperative. They inform the general public about the nature and benefits of cooperation.
6. **Cooperation Among Cooperatives:** Cooperatives serve their members most effectively and strengthen the cooperative movement by working together through local, national, regional, and international structures.
7. **Concern for Community:** While focusing on member needs, cooperatives work for the sustainable development of their communities through policies accepted by their members.

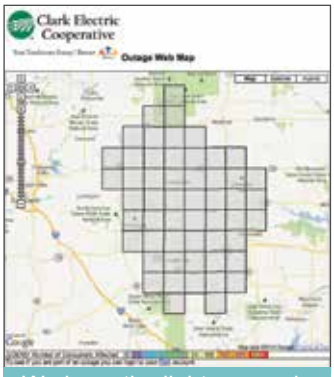
These seven principles are underpinned by six ideals — the values of Self-Help, Self-Responsibility, Democracy, Equality, Equity, and Solidarity.

Above and Beyond: Electric co-op membership offers value far beyond affordable, reliable electricity

Here at Clark Electric Cooperative, we work hard to deliver safe, affordable, and reliable electricity to our 9,000 members every day. But we don't stop there. Because we're a cooperative, we strive to do much more, to find ways of providing real value to you and the communities we serve.

So what exactly does real value mean? Well, in some ways it's basic, like connecting with a real, local person when you call our office, rather than just a recording. It could be finding a copy of the *Wisconsin Energy Cooperative News* in your mailbox every month, which keeps you informed about Clark Electric Cooperative, the electric industry as a whole, and what's happening at the state and federal levels. It's also providing the best possible service at the best possible price, returning capital credits on an annual basis, and always remembering that members own this organization.





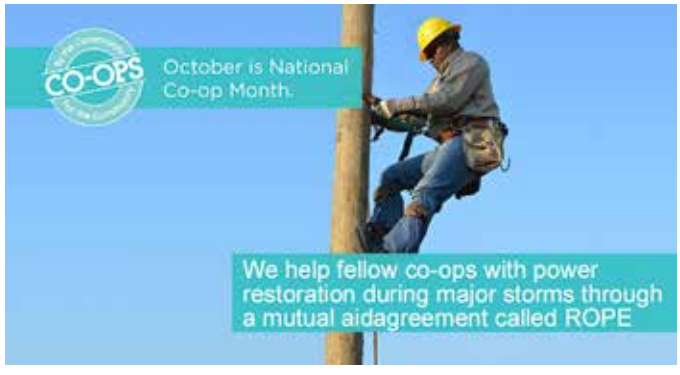
We keep the lights on and communicate restoration progress with you.

Real value also means getting the lights back on as quickly as possible and communicating with you as to how outages are progressing. The cooperative has our outage information map on our website that allows you to see outages and track our progress. If you are traveling away from home you can even see if you are part of a predicted outage. The application works with smart phones, tablets, and computers. All you need is access to the Internet.

Real value can also been seen with cooperatives helping cooperatives. Electric cooperatives nationwide have executed a mutual-aid agreement that brings line crews in from other co-ops to help us restore power in the event of major storms. You may recall seeing our cooperative principles in action when cooperatives from Wisconsin sent line crews to the Gulf Coast in response to Hurricane Katrina, and later to Florida in response to Hurricane Irma.

Real value is commitment to community. In addition to providing opportunities for our youth through scholarships and leadership training, in 2004, Clark Electric Appliance and Satellite Inc. established the Adler-Clark Electric Community Commitment Foundation to support programs and events that enrich the lives of people in Clark County and the surrounding communities. The mission is to strengthen local communities by aiding not-for-profit and community organizations fund projects that will enhance the quality of life for residents of this area. To date, the Foundation has awarded $500,910.

October marks National Cooperative Month, when we celebrate co-ops and talk about why our not-for-profit, consumer-owned business model is special. Offering our members real value—and working to improve the quality of life in the communities we serve—is just one way we set ourselves apart. To learn more, please visit www.cecoop.com or cooperative.com.



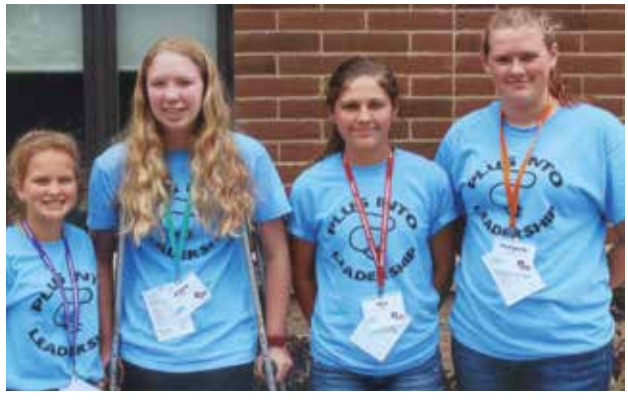
STUDENTS EXPLORE THE COOPERATIVE DIFFERENCE AT YOUTH LEADERSHIP CONGRESS

Clark Electric Cooperative sponsored four students to this year's 56th Youth Leadership Conference (YLC) that was held at UW-River Falls July 24–26. They joined more than 100 students from cooperatives throughout Wisconsin to develop their leadership skills while learning the purpose, operation, and scope of cooperative businesses.

Sierra Myers from Greenwood, MaKenzie Skibbie from Stanley, Alyssa Beran and Mya Ruesch from Abbotsford represented Clark Electric at this year's conference. John Slipek, FFA advisor at Abbotsford High School, accompanied the students as a chaperone. The YLC is designed to provide today's youth with stronger leadership skills, as well as a broader understanding of electric co-ops.

Students explored their leadership potential through a mix of challenging team-building activities and interactive sessions focused on the importance of setting goals and how determination, hard work, and persistence pay off, and how to step up to be a leader whether you are in a leadership position or not. Students also had a chance to experience campus life, make new friends, and hear firsthand how they can make a positive impact in their schools and communities.

"It was so much fun to meet new people and learn more about what cooperatives do for the community. The leadership games and activities taught me a lot. I really enjoyed the inspirational speaker. The conference gave me an opportunity to get out of my comfort zone and make some great friends from all over the state. It was an amazing opportunity!" These are a few of the comments received from the students who represented CEC.


Left to right: Sierra Myers, Greenwood; Alyssa Beran, Abbotsford; Mya Ruesch, Abbotsford; and MaKenzie Skibbie, Stanley.

Wisconsin's electric cooperatives and UW-River Falls have co-sponsored this event for 56 years to demonstrate to high school students the basics of cooperatives and how they can apply the ideals and philosophies of cooperation directly to their lives. Students who attend the YLC improve their ability to interact with their peers and demonstrate their desire to be leaders.

Each spring Clark Electric Cooperative contacts schools in our service area asking for students to represent the cooperative at the Youth Leadership Congress. This is a great opportunity for students entering 10th or 11th grade.

ELECTRIC VEHICLES: *Powering the future?*

By Tim Stewart, CEO/Manager

You certainly hear a lot of buzz being generated around electric vehicles (EV). Perhaps you have seen commercials advertising them; perhaps you have seen charging stations; perhaps you have even seen an EV around town or going down the highway. I would like to devote this month's article to exploring electric vehicles.

First, Some History

You may be surprised to learn that EVs are not a new invention. While history is uncertain about who actually created the very first EV, what is certain is that there were electric motors in use as far back as early 1800s. One known electric motor was created in 1828 by Anyos Jedlik. He made a small model car via a small electric motor. Sometime between 1832 and 1839, a larger electric motor created by Scottish inventor Robert Anderson was used to drive a carriage. In 1835, two small-scale EVs were created, one in Holland and one in the United States by Thomas Davenport. Davenport would later create the first electric car to run on batteries, although these batteries were non-rechargeable and were unable to give the car much range.

In the early 1900s, William Morrison created what many consider the first practical electric car, although it still lacked range. Hybrids were also created during this time to help solve a number of issues with the EV. During this period, EVs outsold gasoline cars 10 to one. EVs dominated the roads and dealer showrooms. Some automobile companies, like Oldsmobile and Studebaker, actually started out as successful EV companies. Many innovators at the time took note of the EVs' high demand, exploring ways to improve the technology. For example, Ferdinand Porsch, founder of the sports car company, developed an electric car in 1898. He created the world's first hybrid electric car.

One reason EVs were so popular in major cities was the infrastructure for electricity was almost non-existent outside of city boundaries, limiting EVs to city-only travel. In the early 1900s, electric cars were at their heyday, accounting for around a third of all vehicles on the road. This is because they were perfect for short trips around the city, and poor road conditions outside cities meant few cars of any type could venture farther. As more people gained access to electricity in the 1910s, it became easier to charge electric cars.

Fast Forward to Today

In the late 1960s and early 1970s, soaring oil prices and gasoline shortages created a growing interest in lowering the U.S.'s dependence on foreign oil. Congress passed the Electric and Hybrid Vehicle Research Development, and Demonstration Act of 1976, authorizing the Energy Department to support research and development in electric hybrid vehicles. Automakers began exploring options for alternative fuel vehicles. Even NASA helped raise the profile of the electric vehicle when its electric Lunar Rover became the first manned vehicle to drive on the moon in 1971. Fast forward again to the 1990s. New federal and state regulations begin to drive change. The passage of the 1990 Clean Air Act Amendment and the 1992 Energy Policy Act, plus new transportation emissions regulations, helped create a renewed interest in EVs in the United States.

While all the starts and stops of the EV industry showed the promise of electric technology, the true revival really happened with the introduction of the Toyota Prius, released in 1997. Prius became the world's first mass-produced hybrid electric vehicle. In 2000, the Prius was released worldwide, helping to raise the profile of the car. A second event that helped reshape electric vehicles was the announcement in 2006 that a small Silicon Valley startup, Tesla Motors, would start producing a luxury electric sports car that could go more than 200 miles on a single charge. Tesla's announcement and subsequent success spurred many automakers to accelerate work on their own electric vehicles. In late 2010, the Chevy Volt and the Nissan LEAF were released in the U.S. market. At around this this same time, battery technology improved significantly while costs came down.

The Future of Electric Cars

EVs made up less than 2 percent of light vehicles sold in the United States in 2018, but sales increased 63 percent over 2017, according to the Alliance of Auto Manufacturers. EV growth is expected to expand exponentially in the coming years as the technology improves, prices decline, and environmental awareness increases. *Bloomberg* projects that by 2040, 57 percent of all passenger vehicles globally will be electric.

Due to all the advances in this industry over recent years, the appeal of EVs continues to gain momentum. In fact, we hear more and more car makers stating that they will be producing more. As more electric vehicle models become available, you may find yourself researching the purchase of your first electric vehicle. Remember, EVs are not just cars. Harley Davidson Motorcycle Company has introduced the Live Wire—an electric motorcycle.

"Watt's" A Charge Worth?

Electricity	*Gasoline Equivalent*
13¢/kWh	$1.08/gallon
12¢*/kWh	$1/gallon
11¢/kWh	92¢/gallon

Based on a gasoline-fueled vehicle with 25 mpg
**The national average for electricity is 12 cents per kilowatt-hour (kWh)*

Rebates available for home charging station + installation.

Pros and Cons

Pros

- Less Maintenance
- Cost of Operation is Less
- No Tailpipe—Less Emissions
- Green—Especially when paired with renewable energy
- Performance

Cons

- Purchase Price
- Range
- Charging Infrastructure
- Limited Car Dealerships

Chevy Bolt—By the Numbers Clark Electric Cooperative Appliance and Satellite, Clark Electric Cooperative's wholly owned subsidiary, has recently purchased a Chevy Bolt for its daily driving needs. The Bolt is a front-wheel drive vehicle that has a range of 238 miles on a single charge. The Bolt features a 200 HP motor, gets 119 miles per gallon equivalent, has a cost of gasoline equivalent of around $1 per gallon, and can be purchased locally.

Charging at Home Charging at home is easy and inexpensive. EV owners can utilize a standard 120-volt outlet to charge the vehicle; this is referred to as a Level I charger. This type of charge happens very slowly over the course of many hours, charging approximately four miles of range per hour. The most common home charging option is referred to as Level II charging. With Level II charging, EV owners will need to get a Level II charger. This is typically installed on a 45–50 amp, 240-volt circuit in a garage or near where the EV will park. With a Level II charger, charging time increases drastically to approximately 25 miles of range per hour—easily restoring full battery life and perfect for overnight charging.

There is a growing network of public charging options being installed near shopping centers, hotels, car dealerships, and electric utility offices, including Clark Electric Cooperative. An excellent source for public charging availability is www.plugshare.com or via the plugshare app on your smartphone.

Speaking of charging, many electric utilities offer incentives for placing the charging station on load management to take advantage of off-peak hours, significantly lowering your cost. For more details contact Clark Electric Cooperative.

Sources for this article: www.lelandwest.com; www.energy.gov; Wikipedia.org; *RE Magazine*, August 2019 and September 2019

ENERGY ASSISTANCE AVAILABLE FOR QUALIFYING MEMBERS

The heating season has now begun. It's important for you to make every attempt to keep current on your electric bill. We understand that things do happen that put financial burdens on people. Certain government organizations can offer heating assistance or point you in the direction of a group that can help.

The Wisconsin Home Energy Assistance Program (WHEAP) administers the federally funded Low Income Home Energy Assistance Program (LIHEAP) and Public Benefits Energy Assistance Program. LIHEAP and its related services help more than 230,000 Wisconsin households annually.

For more information and application details, please contact your local office:

Clark County 715-743-5233
Department of Social Services
Chippewa County.....715-726-7862
Department of Human Services/
Economic Support
Marathon County..... 715-842-3111
Energy Services, Inc.
Taylor County.....715-748-6123
Human Services Department
Wood County
Department of Social Services
Wisconsin Rapids office ...715-421-8600
Marshfield office.....715-387-6374
Jackson County 715-284-4301
Department of Health & Human Services

INCOME GUIDELINES FOR THE 2019-2020 HOME ENERGY PLUS PROGRAM YEAR

60 percent of state median income guidelines

Household Size	3 Month Income	Annual Income
1	$ 7,168.25	$28,673
2	$ 9,374.00	$37,496
3	$11,579.50	$46,318
4	$13,785.25	$55,141
5	$15,991.00	$63,964
6	$18,196.50	$72,786
7	$18,610.00	$74,440
8	$19,023.75	$76,095

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