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### **Office Hours**

8 a.m.-4:30 p.m., Monday-Friday Open over the lunch hour

### **Payment Locations**

CENTRAL NATIONAL BANK IN WALMART SUPERCENTER

521 E. Chestnut St., Junction City, KS 66441

**FARMERS STATE BANK** 

447 Harrison, Lindsborg, KS 67456

### Outage Information

IN CASE OF AN OUTAGE, CALL

800-376-3533. After-hours calls will be answered by dispatch and forwarded to standby personnel.

### **Find Out More**



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# **Electric Vehicles are Not a Fad**

BY TIMOTHY J. POWER, CEO

In last month's Kansas Country Living, you may have read the article about the three types of electric vehicle (EV) chargers. This month, we want to tell you about the three types of EVs and discuss the expected growth in the EV industry.

Dating all the way back to the early 1900s, the history of EVs is marked by many stops and starts. For one reason or another EVs have never caught on with most of the millions of drivers across the U.S. Fast forward to today and we see an EV industry that is growing; in fact, it is growing so fast that it is expected to soon have a market share equal to internal combustion engine (ICE) vehicles.1 But before I delve into that market forecast, I want to provide a little background on the three types of EVs.

In most cases, EVs that have been available in the U.S. have been hybrid electric vehicles (HEVs), which run on gas, but also have an electric motor

to complement the gas engine. The electric motor battery is constantly charged by the gas engine and vehicle brakes. HEVs are very fuel-efficient, with most manufacturers advertising 40-60 mpg. The Toyota Prius is an example of an HEV.

Plug-in hybrid electric vehicles (PHEVs) get slightly better gas mileage than HEVs, due to a larger battery. A PHEV requires you to fully charge the electric battery by plugging it in at home or at a commercial or community charging station. PHEVs are seen by many as a good transition vehicle from an ICE vehicle to an EV. The Chevy Volt is an example of a PHEV.

But the EV industry is going to be dominated by the battery electric vehicle (BEV). These vehicles run completely on electricity from a large battery, which allows the vehicle to be

Continued on page 16C ▶

### TO MEMBERS OF DSO ELECTRIC COOPERATIVE, INC. **Notice of Special Board Meeting**

The board of directors of DSO Electric Cooperative, Inc. (DSO) will meet on Sept. 20, 2021, at 6 p.m. at the cooperative's office, located at 201 Dakota Drive in Solomon, to discuss and vote upon revisions to the following rates: R-1, R-11, R-2, R-21, R-31 (new rate), PSL-15, SL-15, and PCA.

This meeting is open to all members. The proposed changes will be posted on DSO's website by Aug. 31, 2021. For planning purposes, if you plan to attend, please contact the DSO office during business hours at 800-376-3533.

K.S.A. 66-104d(g) provides that members may petition the Kansas Corporation Commission (KCC) to review of any rate change. DSO's rates are the responsibility of its board of directors and DSO is not rateregulated by the KCC.

# Let's Beat the **Peak Together**

As a member of DSO Electric Cooperative, you know how to make smart energy choices that help you save money. But did you know that when you use electricity can be just as important as how much you use?

Throughout the day, energy use fluctuates based on consumer demand. Typically, households use larger amounts of electricity in the morning when most people are getting ready for their day, and in the evenings when people return from work, cook dinner, wash clothes and watch television.

These times when people in our community are using more electricity at the same time are called "peak" hours. The cost for DSO to provide power is higher during these times because of the additional demand for electricity. The peak hours for DSO are the hours from 3-6 p.m.

By shifting some of your energy use to hours when demand is lower, also known as off-peak hours, you can save money on your energy bills and help keep rates lower for our community.

Here are a few easy ways you can shift energy use to

- Adjust your thermostat. During summer months, raise the thermostat a few degrees during peak hours.
- ▶ Wash full loads of clothes in cold water during offpeak hours.
- ▶ Run the dishwasher right before you go to bed, or air-dry dishes by opening the dishwasher instead of using the heated dry cycle.
- ► Turn off lights and electronics when not in use. (Try to make this a daily habit, whether during peak or off-peak hours.)
- Turn off ceiling fans if people aren't in the room. A good rule of thumb is fans cool people, not places. There are many ways to save energy and money by making a few minor adjustments to your daily routine

We're here to help. Contact us if you have questions about your energy bill or for additional energy-saving tips.



### **Working Together to Combat Cyber Attacks**

Computer hacking is a top news story these days, and for years electric cooperatives have focused on blocking cyber threats from interfering with the nationwide electric grid of wires and poles that keep our lights on.

You can also help defend against that electronic mischief. And you should. When using internet-connected devices like your smart phone, you're instantly connected to the grid.

The network of power lines, transformers and substations adds up to an incredibly complex system that reliably brings us conveniences of modern life. That network is transforming into a "smart grid" that does an even better job of delivering electricity. It's adding renewable energy sources like solar and wind power, which calls for sophisticated software to figure out how to keep power flowing at night or when the wind isn't blowing. Computer algorithms make plans for the most efficient and reliable operations when forecasts call for storms, wildfires or times of high-power use.

Making such modern miracles happen means joining with another dominant part of today's world — the internet.

The blink-of-an-eye speed of balancing the generation of electricity with your flip of a light switch relies heavily on the electronically connected world. The internet is incredibly useful but also a target of troublemakers, from lone, self-taught experts to international crime rings.

Electric utilities know this and work every day through their own offices and national organizations on cyber safety.

You can take smart steps too, to protect yourself, and the electric grid. Because the power grid uses the internet, that means that any of your internetconnected devices are also part of the grid: computers, security cameras, printers, smart TVs, health monitors — even cars and lightbulbs can be connected to the internet.

Here are the top tips experts advise to defend against hackers:

► LOCK THE FRONT DOOR. If you have

wireless internet in your home, the traffic comes in through the router. If you take just one step, create a strong password for that router, and set a reminder to change the password regularly.

- ▶ USE A SECRET CODE. Weak passwords make things easier for hackers. A study found the most-used password in 2021 was, you guessed it, "123456." A more secure option uses combinations of upper-case and lower-case letters, combined with numbers and special symbols like "&" or "!" There are apps to help you remember passwords. A simple old-fashioned notebook can also work, as long as you're certain you'll never lose it and no one else has access to it. And be aware that every major internet-connected appliance comes with its own factory-installed password you should change right away. The password for my smart TV was, you guessed it, 123456.
- ► STAY VIGILANT. If you receive an email with an attachment you weren't expecting, don't open the attachment. If you get a message with a link you didn't know was coming, don't click it. Even if it's from a friend, phone them and ask if they sent it hackers can send messages using your friend's address.
- ► STAY STATE-OF-THE-ART. Your computer and other devices will regularly offer updates — install them. They often contain security updates to protect against the latest cyber threats. And they will come to you directly through your computer, phone or printer — don't be fooled by an email or message saying it's an update. You can also go online and ask about any updates to your device.

October is National Cybersecurity Awareness Month, and the Department of Homeland Security has titled this year's theme, "If you connect it, protect it." That's good advice for your home — and for the electric grid.







#### IN ENCLOSED SPACES

Always use a generator in a well-ventilated area.



### AR WINDOWS OR DOORS

Place it at least 20 feet away from windows and doors.



#### **IN A GARAGE**

Even if the door is up, never use a generator in a garage.



#### IN THE ELEMENTS

Run on a dry surface under a canopy-like structure (but not in a carport).



#### IN DISREPAIR

Make sure your generator is well-maintained and in good working order.



## WALL OUTLET

This can be deadly to you, family members, neighbors and utility workers.



Use a properly rated cord to plug appliances into a generator.



should be on every level of your home and tested monthly.



# Electric Vehicles are Not a Fad Continued from page 16A>

driven 200-300 miles between charges, in most cases. BEVs are the most efficient EVs and often see gas-equivalent numbers around 100 mpg!<sup>2</sup> Examples of BEVs include the Nissan Leaf and various Tesla models.

OK, so now let's go back to the expected growth in the EV industry. The graph on the right from evadoption.com is just one of many projections you can find of the fastgrowing EV market. The growth is projected to happen for a variety of reasons. One reason is battery technology; it has advanced exponentially in the past decade and prices have come down.1 Another reason for growth is

infrastructure. More charging stations have been put in place across the U.S. and thousands more are going to be built over the next few years.3 But the expected growth is mainly due to vehicle manufacturers' aggressive plans to move to all-EV production.4

As witness to these plans, consider the new EVs you can buy in 2025.5 These vehicles will add to the many EV models currently available from the likes of Tesla, Volvo and Volkswagen. But the vehicle getting the most hype for next year is the Ford FI50 Lightning. It already boasts of over 120,000 orders.6 The truck has many attractive features, not the least of which are its range of 300 miles (with a 1,000 lb. payload) and its ability to serve as a whole house backup generator.7 With so many different models of EVs

around, it will be clear in the next few years that the EV industry is here to stay.

Next month, we will provide some EV resources that you might find helpful if you are considering an EV as your next vehicle.

1 HTTPS://ABOUT.BNFF.COM/FLECTRIC-VFHICLE-OUTLOOK: 2 HTTPS://WWW.ENFRGYSAGE COM/ELECTRIC-VEHICLES/BUYERS-GUIDE/MPG-ELECTRIC-VEHICLES; 3 HTTPS://WWW. MOTORBISCUIT.COM/MANY-EV-CHARGING-STATIONS-U-S; 4 HTTPS://WWW.FORBES. COM/WHEELS/NEWS/AUTOMAKER-EV-PLANS; 5 HTTPS://WWW.CARANDDRIVER.COM/ NEWS/G29994375/FUTURE-ELECTRIC-CARS-TRUCKS; HTTPS://WWW.KBB.COM/BEST-CARS/ ELECTRIC-CARS-THAT-ARE-COMING-IN-2022: 6 HTTPS://TECHCRUNCH.COM/2021/07/28/ FORD-F-150-LIGHTNING-ELECTRIC-PICKUP-RESERVATIONS-SURPASS-120000; 7 HTTPS:// WWW.FORD.COM/TRUCKS/F150/F150-LIGHTNING/2022/

### US EVs (BEV & PHEV) Sales & Sales Share Forecast: 2021-2030



Historical Sales Data: GoodCarBadCar.net, InsideEVs, IHS Markit / Auto Manufacturers Alliance, anced Technology Sales Dashboard | Research & Chart: Loren McDonald/EVAdoptio

