

# **SPOTLIGHT OUR COMMUNITY** *Calendar Photo Contest*

We would like to invite our members to participate in Sac Osage Electric Cooperative's "Spotlight Our Community" photo contest. Thirteen photos will be selected for display in our 2020 Calendar. We would like photos for all seasons. Start looking through those memory cards and have your cameras ready so you can capture just the right picture for our contest. Photos can be any appropriate subject or scene, but must be taken in the general Sac Osage Electric area. A panel of judges will select a photo for each month and one for the cover. Each winner selected will receive a \$25.00 credit on their bill.

#### **CONTEST RULES:**

ONLY Sac Osage Electric Cooperative members are eligible.
Limit TWO entries per person. Each entry must include name, address, phone number and Sac Osage account number.
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3) Submit an 8"x 10" print on photo quality paper or email a .jpg image to jdody@sacosage.com.

4) Images must be HORIZONTAL.

6) Photos may be any appropriate subject or scene, but must be taken in the Sac Osage area (Barton, Benton, Cedar, Dade, Henry, Hickory, Polk, St. Clair and Vernon).

7) DEADLINE FOR ENTRIES: September 20, 2019



### Watch Out for Copycat Bill Payment Websites

Making payments through Sac Osage Electric's online bill payment site is a free service provided for you. Some bill payment sites not affiliated with Sac Osage Electric try to mimic our website. These sites use logos and feature screenshots from our website, but charge hefty fees for simply making a payment. Don't be fooled. Go to www.sacosage.com!

# The New Residential Rate Structure Starts April 1, 2019

Sac Osage Electric Cooperative has developed a new revenueneutral rate structure which will go into effect on April 1, 2019. This new rate structure will significantly change the way residential bills are calculated. The Board of Directors felt it was in the best interest of the Cooperative to do all it could to create a rate structure in which price signals allow consumers to see how their daily usage patterns effect the Cooperative and allow members to be billed more equitably.

The Cooperative estimates that 52% of the total cost of electric service in 2019 will be to pay for purchased power from our energy provider, KAMO Power. Of the \$9.4M that KAMO is expected to bill us in 2019, about 45% will be in the form of demand charges, which are determined by peak loads that Sac Osage Electric's members place on KAMO's system. Historically, the Cooperative's peak loads have occurred between the hours of 6-9 AM and 4-7 PM. Unrestricted use of power by members during peak load periods can significantly impact the KAMO demand charges billed to Sac Osage Electric.

For decades, our present declining block rate structure was considered the best billing method available, but that methodology contained virtually no price signals. For example, members with high kWh usage generally paid more than their fair share of the facility costs for poles, wires, transformers, etc., while members with sporadic energy use generally did not contribute enough. In the past, members that used electricity during off-peak hours paid the same as those using electricity during the peak hours because the Cooperative only received daily readings.

Now that meter reading technology is available to measure hourly kW demands, the new rate design can bill members a demand charge based on electricity consumed during peak and off-peak periods. Improved price signals will allow members to better see how their usage affects overall expenses and encourages wiser energy use, which is something the declining block rates did not do.

The redesigned rate structure consists of the following charges: • Availability Charge – A fixed fee of \$30.00 (\$33.00 for seasonal members);

• **Peak Demand Charges** – A member's highest hourly kW demand recorded during the peak demand periods of 6-9 AM and 4-7 PM will be billed a \$6.36 per kW demand charge. The highest demand recorded during off-peak hours will be billed \$1.50 offpeak demand charge; and

• **Energy Charges** – all kWh's consumed will be billed at \$.062 per kWh.

**Note:** Using Sac Osage Electric's SmartHub app on your smart phone or SmartHub on the internet is a great way to monitor your usage. To get started using SmartHub, see SmartHub Installation at www.sacosage.com.

# Stay in Hot Water

#### Know which type of water heater suits your home

Water heaters use about 20 percent of the energy on your utility bill so it pays to pay attention to how you use hot water and what type of water heater to buy when you need one

There are several types of water heaters to choose from, plus different fuel types they use: electricity, gas, propane, fuel oil, geothermal, solar. The U.S. Department of Energy has detailed descriptions of choices at http://s.coop/2atk6. Also be sure to use a professional technician to install any heater you buy.

Following are key points about your choices:

Storage electric-resistance heater — This is the most common type of heater. It heats and stores 20 to 80 gallons of water in an insulated tank where the water is constantly maintained at the thermostat's setting, ideally 120 degrees. Energy can be wasted even when a hot water tap isn't running, which is most of the time. This is called standby heat loss. Some storage water heaters have heavily insulated tanks, which can significantly reduce standby losses, according to DOE. Look for tanks with a thermal resistance of R-12 to R-25.

Solar heaters — These heaters preheat water through thermal collectors before it reaches a conventional water heater. They are costly on the front end but may qualify for federal tax credits. The fuel, of course, is free but keep in mind the sun doesn't always shine or shine long enough. Conventional storage water heaters usually provide backup.

The two types of types of solar heaters are active, with circulating pumps and controls, and passive without, and therefore less expensive. For details, go to http://s.coop/2atk7. Heat pump water heaters — They cost more up front, but in moderate climates like Missouri's, can save up to 50 percent on your water heating bill. Whereas most homeowners use heat pumps to efficiently heat and cool their homes, they also can be used to heat water, either as stand-alone systems or as combination water heating and space conditioning systems.

Heat pump water heaters use electricity to move heat from one place to another instead of generating heat directly. Therefore, they can be two to three times more energy efficient than conventional electric resistance water heaters.

There are both air-source heat pump varieties and geothermal heat pump varieties. The latter requires a desuperheater, which is a small auxiliary heat exchanger that uses superheated gases from the heat pump's compressor to heat water. Both varieties need locations in the 40 to 90 degree range with at least 1,000 cubic feet of air space around the water heater. For details, go to http://s.coop/2atk8.

#### Sac Osage Electric Cooperative offers a \$50 **Electric Tank Water Heater Rebate**

#### **Requisites:**

• Must have an EF (Energy Factor) of .90 or higher

• Must be new installation or replacement of an electric or gas tank water heater. • Tankless water heaters do not qualify.

Submit rebate form along with a copy of sales receipt within 90 days of purchase. The rebate form may be found on our website at www.sacosage.com under forms, or call our office at 417-876-2721.

# Sac Osage Electric Cooperative News-

## Cut your water-heating costs

After heating and air conditioning, your water heater is the single largest energy expense in your home. It could account for up to 20 percent of your utility bill.

Below are a few simple ways to cut your water heating costs. Also go to http://s.coop/2atk9 for a handy chart that tells you how many gallons of hot water are used for showers, washing clothes and dishes, etc.

Select a water heater with as small a tank as possible to meet your family's - Start by looking at the EnergyGuide label on a heater for the First needs Hour Rating in gallons. That's the amount of hot water in gallons the heater will supply per hour (starting with a tank full of hot water). Then estimate how much hot water your family uses in a peak period, such as early morning. Use the link above to help you figure that out.

Lower tank temperatures, and add extra tank insulation — Heat lost through tank walls is called standby heat loss and can account for 20 to 60 percent of the total cost of heating the water. Lowering the tank temperature to about 120 degrees and adding extra tank insulation will cut these losses.

<u>Use less hot water</u> — The Missouri Department of Natural Resources offers these simple ways to reduce your hot water use:

• Install high-efficiency showerheads so that less water needs to be heated for showers

• Install low-flow faucet aerators for the kitchen

• Take shorter showers - Even a 5-minute shower with an energy-efficient showerhead can use 12 gallons of water; compare that to 24 gallons for a 5-minute shower without an efficient showerhead

• Use dishwashers wisely instead of washing dishes by hand

• Set washer cycles for the lowest temperature and water amount that will get clothes clean

• Rinse on cold water setting; a hot wash/warm rinse laundry uses 30 gallons of water compared to only 19 for a hot wash/cold rinse or 12 for a warm wash/ cold rinse

• Set water heater temperature at 120 degrees

Reduce heat losses from distribution — Distribution costs occur in pipes when hot water flows through them. Insulate pipes and short runs to plumbing fixtures. Fix leaks in pipes. Install a heat trap at the water heater to stop convection of hot water into the hot and cold water pipes above the water

heater. A heat trap is a valve or loop of pipe that allows water to flow into a tank but prevents unwanted hot water from flowing out of the tank, according to the U.S. Department of Energy. You can save \$15 to \$30 on your water heating bill with the installation of a pair of inexpensive heat traps. Be sure to have a professional installation.



### Save \$ with your existing water heater

You can save energy dollars without buying a new water heater. Here are a few suggestions from the U.S. Department of Energy:

<u>Conserve water</u> — Use less water. That simple change may save you more than other options. A family of four each showering five minutes a day can use about 700 gallons a week, which is a three-year drinking water supply for one person. Use waterconserving showerheads and faucet aerators to cut hot water use in half. A family of four can save 14,000 gallons of water a year and the energy needed to heat it.

Insulate your existing water heater and pipes — If your electric water heater was installed before 2004, adding an insulating jacket is one of the most effective do-ityourself energy-saving projects, especially if your heater is in an unheated space. The jacket will reduce standby heat loss by 25 to 40 percent, saving 4 to 9 percent on your water heating bills. Follow directions carefully when installing an insulation jacket.

Insulating hot water pipes reduces heat loss and can raise water temperature 2 to 4 degrees hotter than uninsulated pipes can deliver. DOE recommends insulating all accessible hot water pipes, especially within 3 feet of the water heater. Also insulate cold water inlet pipes for the first 3 feet. Pipe sleeves made with polyethylene or neoprene foam are the most commonly used insulation.

It also helps to place your heater in a space that is heated and cooled.

Lower the water heater temperature — Keep your heater thermostat at about 120 degrees. Each 10-degree reduction in water temperature will generally save 3 to 5 percent on your water heating costs. When on vacation, turn the thermostat down to the lowest possible setting or turn the heater off completely.

Fix leaks — A leak of one drip per second can cost \$1 a month. Repair leaks in fau-

cets, showerheads and pipes, but if your tank leaks, you need a new heater. Install low-flow fixtures, showerheads and faucets - For about \$10 to \$20 each, you can buy quality, low-flow fixtures and cut your water use by 25 to 60 percent. Federal regulations mandate new showerhead flow rates of 2.5 gallons per minute at a water pressure of 80 pounds per square inch.

If your showerheads predate 1992, use this quick test to determine if you should replace your old heads with new ones:

1. Place a bucket marked in gallons under your showerhead

2. Turn on the shower at the normal water pressure you use. Time how many seconds it takes to fill the bucket to the 1-gallon mark. If it takes less than 20 seconds to reach the mark, you could benefit from a low-flow showerhead.

3. Replace the aerator (the screw-on tip of the faucet) with ones that restrict flow at about 1 gallon per minute.

Buy efficient dishwashers and clothes washers - You consume less energy with an energy-efficient dishwasher properly used than washing dishes by hand. Check the EnergyGuide label to see how much energy a unit uses. Be aware that compactcapacity dishwashers may actually use more energy because they must be used more frequently. Look for dishwashers with booster heaters that efficiently boost water temperatures to 140 degrees. Such units cost more but will pay for themselves with energy savings in about a year.

Inefficient clothes washers can cost three times as much to operate as energy-efficient ones. Look for washers that allow you to adjust water temperature and levels, spin dry and load from the front.