

Solar project will benefit all our members

Progress continues towards the installation of two – one megawatt (1 MW) utility scale solar projects right here in the area we serve. Heartland Rural Electric Cooperative is working closely with other electric cooperatives in Kansas on these projects to help secure the best pricing available. Heartland is taking a leadership role in helping to provide cost-effective renewable energy that benefits all consumer-members.

KEEPING YOU INFORMED



MARK SCHEIBE
HEARTLAND CEO

Taking this step has required a lot of careful research and preparation here at Heartland. Similarly, a lot of our consumer-members reach out to us when doing research when looking at making the investment of adding solar panels to their home, farm or business. There is lots to consider.

Since the last issue of Heartbeat, we have received a few more phone calls than normal from our consumer-members asking about solar. Often people will want to know if adding solar is right for them.

The answer to this question is almost always “it depends”. It depends upon your goals for the project. It depends upon how you currently use electricity. It depends upon if you have a good location to install the panels where the sun shines. It depends on (fill in the blank).

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Top training



Heartland linemen took time for some pole-top safety training recently. Although a lot of work is done from bucket trucks, pole climbing is still a necessary skill for all linemen.

Save energy in the kitchen

We are all spending more time at home, and many of us are cooking more too.

And while the joy of Thanksgiving and Christmas are wonderful rewards, sometimes going all-out can add quite a few dollars to the utility bills.

We all love the kitchen. It's undeniably one of the most-loved rooms in our homes. It's where we gather with family and friends for our favorite meals and memories. But like most of us, you probably aren't thinking about saving

energy when you're planning that perfect dish. Here are four ways you can save energy in the kitchen with minimal effort.

■ **When possible, cook with smaller appliances.** Using smaller kitchen appliances, like slow cookers, toaster ovens and convection ovens is more energy efficient than using your large stove or oven. According to the Department of Energy, a toaster or convection oven uses one-third to one-

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Having clear and attainable goals is the key. For Heartland, the primary goal for installing solar is to help reduce our peak energy usage during the summer months when electricity is the most expensive to purchase. The benefits of having a cost-effective, non-carbon-based energy source help solidify that solar photovoltaic (PV) is the right solution.

Proper sizing of a solar system is critical, not only for Heartland with its two projects, but also for every consumer-member interested in installing solar themselves. This maximizes the value

of the renewable energy, providing more stable electric rates for years to come.

Electric rates in Kansas continue to be in the news. When the Legislature returns to Topeka in January, it is likely to again be an area of discussion. They have been studying electric rates over the last few years and two studies were completed in 2020 to help analyze what has caused them to change over time.

One of the areas that the study released in July of 2020 by AECOM discusses the value of adding solar for residential consumers compared to not adding solar. The study showed that “a typical residential and commercial customer would not be financially better off investing in a solar PV system, as it would increase their overall costs.” (pg. 67 of Part 2 submitted by AECOM)

This is not intended to scare anyone away from adding residential solar PV, but instead intended to help you know that Heartland is here to help. Heartland has a dedicated and trained staff to listen to your goals and help provide additional information to make your decisions easier. Heartland’s website (heartland-rec.com) has a very thorough renewable energy FAQ to help get you started.

With all the uncertainty in the world currently, know that Heartland Rural Electric Cooperative is here to provide much more than reliable electricity. We are here to be a trusted source of information that enhances the value of living in rural Kansas, each and every day.

We will keep you updated on the progress of our solar projects as they move forward.

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half as much energy as a full-sized oven.

■ Unplug appliances that draw phantom energy load.

Vampires aren’t just around during Halloween. It’s possible you have energy vampires in your kitchen – these are the appliances that draw energy even when they’re not in use, like coffee makers, microwaves and toaster ovens. The DOE estimates that one home’s energy vampires left plugged in year-round can add up to \$100-\$200 in wasted energy costs. Unplug them when they’re not in use, or better yet, use a power strip for convenient control.

■ **Help large appliances work less.** There are small ways you can help your larger kitchen appliances run more efficiently. For example, keep range-top burners clean from spills and fallen foods so they’ll reflect heat better. When it’s time to put leftovers in the refrigerator, make sure the food is covered and allow it to cool down first. That way, the fridge doesn’t have to work harder to cool warm food.

■ **Use your dishwasher efficiently.** Only run full loads, and avoid using the “rinse hold” function on your machine for just a few dirty dishes; it uses 3-7 gallons of hot water each use. You can also save energy by letting your dishes air dry. If your dishwasher doesn’t have an automatic air-dry switch, simply turn it off after the final rinse and prop the door open so the dishes will dry faster.

■ **Bonus tip:** The best way to save energy is to not use it. Try a tasty, no-bake dessert recipe.

HREC’s cold weather rule

The provisions of the “Cold Weather Rule” establishes the disconnection procedures for delinquent accounts of any Residential Member of the Cooperative throughout the cold weather period, which extends from November 1 through March 31. **The Cold Weather Rule does not apply to members on prepaid billing.**

The Cooperative will not initiate the disconnection process for a Residential Member’s service between November 1 and March 31 when the local National Weather Service office forecasts the temperature to drop below 35 degrees (the activating temperature) within the following 48-hour period unless:

- It is at the Residential Member’s request;
- The service is abandoned;
- A dangerous condition exists on the Member’s premises;
- The Member violates any rule of the Cooperative which adversely affects the safety of the Member or other persons, or the physical integrity of the Cooperative’s delivery system; or
- The Member causes or permits unauthorized interference with, or diversion or use of (meter bypass), Cooperative’s electric service situated on or about the Member’s premises.

In any of these situations, the Cooperative may disconnect the service immediately. Services disconnected under (c), (d) or (e) above may be restored as soon as possible after the physical problems as defined in (c), (d) and (e) above have been corrected.

Good Faith Test: To avoid disconnection during the cold weather period and qualify for the benefits of the Cold Weather Rule the Member must meet the requirements of the “Good Faith Test”. To meet the requirements of the Good Faith Test, the Member will:

- Inform the Cooperative of the Member’s inability to pay the bill in full;
- Give sufficient information to allow the Cooperative to make a payment agreement;
- Make an initial payment of the most recent bill for consumption plus one-third (1/3) of the arrearage;
- Enter a level payment plan agreement for past, current and future charges for electric service with arrears paid in equal installments over the next two (2) months. The Member and the Cooperative may negotiate other payment arrangements mutually agreeable and individualized to the Member’s situation providing the appropriate terms, after the Member has been informed that he or she has at least two (2) months in which to pay;
- Apply for federal, state, local or other funds for which the Member is eligible;
- Not obtain electric service by unauthorized interference with, or diversion or use of (meter bypass), Cooperative’s service situated on or about the Member’s premises;
- Not default on a payment plan.

Responsibilities of the Cooperative:

- Send one (1) written notice mailed by first class mail at least five (5) days prior to termination of service, and attempt one (1) telephone call at least

forty-eight (48) hours prior to disconnection.

- On the day of disconnection, receive a 24-hour forecast to determine the activating temperature from the National Weather Service. If the temperature is then forecast to be below the activating temperature, the disconnection may not be carried out and the Cooperative must suspend for another 48-hour forecast whereby the temperature is above the activating temperature in order to initiate the disconnection procedures;
- Inform the Member by telephone, at the last known telephone number provided to the Cooperative by Member, by, written notice, by personal contact, if applicable and disconnect message on the Member door in order to notify the Member, of the existence of the Cold Weather Rule and that the Member can avoid disconnection by bringing the Member’s electric bill current;
- Inform the Member of, or provide a list of, organizations where funds are available to pay electric bills.

Special meeting to be held

Heartland REC will hold a special rate meeting at 10 a.m. on Tuesday, December 18, 2020, at the co-op’s office in Girard. The agenda includes the adjustment of Heartland’s rates regarding co-op installed LED lights. The meeting is open to all members of the cooperative, but attendance may be limited due to COVID-19 restrictions.

Proper vent fan improves efficiency

Dear Jim: My old bathroom vent fan is noisy and does not remove humidity well. Is there any difference in new fan efficiency and how do I find choose a quiet one? Can I install a new one myself? - Sandi T.

Dear Sandi: With the proper selection of a new bathroom vent fan, there can be significant improvement in overall efficiency and reduced noise. Replacing a bath vent fan is not a difficult project. Some models are designed with multiple duct adapters and brackets for simple installation.

Before running out to the home center store to get a new one, you may be able to improve the function and lower the noise level of your old one. Often just a thorough cleaning of the inside, especially the blade surfaces, increases its air flow and decreases the noise.

To be extra safe, switch off the circuit breaker to the vent fan. Unscrew the grill and the motor mounting screws to get full access. Clean every surface you can reach including up into the duct as far as possible with an alcohol wipe.

Even if the motor bearings are a little worn, cleaning may bring it back into balance and reduce air flow resistance. Another option is to get a lower-cost fan rebuilding kit with just a new motor and blade. This will bring it back to its original efficiency and sound level, but not as good as brand new one.

The sound level of a vent fan is rated in “sones” and is listed on the packaging. The quietest fans are only 0.3 sones, but any under 1.0 are very quiet. At this level, you can barely hear it running. A smaller (meaning less air flow) fan is typically quieter than a large one of equal quality.

To determine the size vent fan your need, the HVI (Home Ventilating Institute, www.hvi.org) recommends 1.1 cfm (cubic feet per minute) of air flow for each square foot of bathroom floor area. When installing a multispeed fan, make sure the maximum air flow rating meets this.

There are differences in the efficiencies of bathroom vent fan designs. To be Energy Star certified, a small fan must vent at least 1.4 cfm/watt-used and a larger fan (90 cfm and larger) must be twice that efficient.

Although the above fan efficiency is somewhat important, the type of fan control has a much greater impact on your utility bills. If a fan runs longer than



necessary, it obviously wastes electricity and draws out excessive conditioned air.

If the fan runs too little or is too small, excess moisture builds up indoors. This can make the air conditioner run longer, affect your comfort, exacerbate allergies, and damage windows and building materials.

A combination motion-sensing and moisture-level-sensing control with a multispeed fan motor and a LED light is by far the best. If the moisture level is not excessively high, the motion sensor will start when you enter the bathroom and stop when you leave it (you may adjust the stop delay).

When showering and creating much moisture, the moisture sensor keeps the fan running after you leave the room until the level drops. The best sensors detect a rapid rise in moisture level and automatically switch the fan to high speed. It goes back to quieter low speed and then stops.

Another super-quiet option is an efficient in-line vent located in the attic. Ducts from the powerful fan can run to two separate inlet grills such as one over the sink and one over the bathtub. It is compatible with any type of sensor and control.

The following companies offer bathroom venting products: Broan/Nutone, (800) 558-1711, www.broan.com; Continental Fan, (800) 779-4021, www.continentalfan.com; Fantech, (800) 747-1762, www.fantech.net; Hunter, (888) 830-1326, www.hunterhomecomfort.com; and Panasonic, (800) 405-0652, www.panasonic.com.

Send inquiries to James Dulley, Heartbeat, 6906 Royalgreen Dr., Cincinnati, OH 45244 or visit www.dulley.com.



A recessed light/vent fan can be installed in a shower stall for efficient ventilation.

Use space heaters carefully and wisely

As temperatures dip, and space heaters fly off the retail shelves, Heartland REC encourages you to use space heaters safely. Many people turn to space heaters—both electric models and those powered by kerosene or propane—as a convenient source of warmth in winter months. However, space heaters can be dangerous if not used properly.

Excessive use of a space heater is not just unsafe, it can also be expensive. A standard 1,500 watt space heater that runs 10 hours each day can add \$50 to your monthly utility bill.

More than 25,000 residential fires every year are associated with space heaters. More than 300 people die in these fires. In addition, an estimated 6,000 people annually receive hospital emergency care for burn injuries connected with space heaters.

Space heater hazards stem not just from fires caused by contact with or close proximity to heating elements. They also include fires started by flammable fuels used in the heaters; defective wiring in the appliance; and carbon monoxide



poisoning caused by improper venting or an incomplete combustion of fuels.

Here are some tips for using your electric space heater safely:

- Use space heaters to provide temporary warmth to small areas.
- Keep the heater at least 3 feet from flammable items such as curtains, furniture, or bedspreads.
- Select a space heater with a guard around the heating element.
- When buying a heater, choose one that has been tested and certified by a nationally recognized testing institution such as Underwriters Laboratories (UL).

- Buy a heater that can handle the area that you want to heat.
- Read and follow the manufacturer's operating instructions.
- Keep children and pets away from space heaters.
- Never leave a space heater unattended.
- Never go to sleep with a space heater on.
- Never use or store flammable liquids near a space heater.
- Be careful when using a heater in a bathroom—it's a high-moisture area that could cause damage.
- Keep heaters away from water to prevent electrocution.
- Do not use an extension cord with a space heater.
- Do not use the heater to dry clothes.
- Be sure the heater's plug fits snugly in an outlet. The cord and plug may feel warm when operating since the unit draws so much power, but they should not feel hot. If they do, unplug the heater and have a qualified repair person check for problems.