



# LIVE LINES

Woodbury County Rural Electric Cooperative

A Touchstone Energy® Cooperative 

February 2023

## The Inflation Reduction Act “Pumps Up” Geothermal & Other Energy Saving Provisions

On August 16, President Joe Biden signed the Inflation Reduction Act (IRA) into law. While there are several provisions in the IRA that are aimed to alleviate inflation, this month’s article will focus on the future rebates and tax incentives, which are or soon will become available to homeowners. It is important to note that we are not tax professionals and the information we share should not be interpreted as tax advice. Please consult your own accountant and/or lawyer for guidance on claiming any of the listed incentives.

### RENEWABLE ENERGY TAX CREDITS:

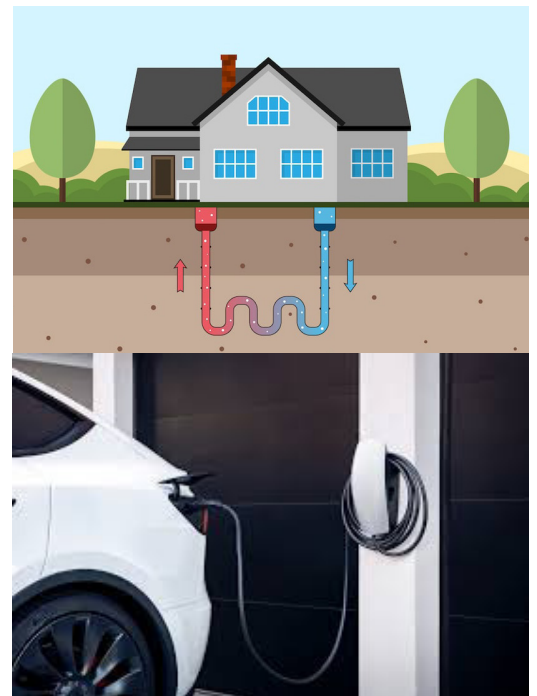
- Geothermal (ground source) heat pumps are now eligible for a 30% tax credit for systems installed in years 2022 through 2032. This can be coupled with a rebate available through Woodbury County REC up to \$10,000. Geothermal significantly reduces energy usage and utility bills for homeowners and business owners and installation is available through our Member Service Department. More details about this tax credit and other residential clean energy credits can be found at [https://www.energystar.gov/about/federal\\_tax\\_credits/renewable\\_energy\\_tax\\_credits](https://www.energystar.gov/about/federal_tax_credits/renewable_energy_tax_credits).
- Solar PV systems installed between 2022 and 2032 are eligible for a 30% tax credit. The credit will decrease to 26% for systems installed in 2033 and to 22% for systems installed in 2034. The tax credit expires starting in 2035 unless Congress renews it. Visit <https://www.energy.gov/eere/solar/homeowners-guide-federal-tax-credit-solar-photovoltaics> for more information.
- Electric vehicles - beginning in 2023, qualifying electric vehicle buyers can claim a tax credit of up to \$4,000 for the purchase of a used EV and up to \$7,500 for a new vehicle. In 2024, the credit will be issued through dealerships at the time of sale. There is one caveat though--EVs must have final assembly in North America to qualify, so some brands will not be able to offer the credit until their North American plants begin operating.

### REBATES:

- Single-family homes are eligible for rebates of up to \$4,000 for modeled energy savings greater than 35% and \$2,000 for modeled savings of 20-35%. Low or Moderate Income households (defined as a household earning less than 80% of area median income (AMI) are eligible for up to \$8,000 in rebates. HVAC improvements and other efficiency projects that meet the required energy savings are eligible for these rebates.

This is a very short list of some provisions associated with the passing of the IRA. Most of the tax incentives and rebates won’t be available until 2023 or each state sets up programs to manage and distribute the incentives. While we wait for more details on how the savings will be rolled out, we encourage you to do your homework when researching how you might be able to save money and energy using the provisions of the IRA. We will provide updates in our newsletter as we receive more information.

*Sources: Geoexchange; Rewiring America; Taxpayer Advocate Service; energystar.gov; energy.gov*



## The Recipe Corner

### Bratwurst Hash

- 4 bratwurst links, halved and sliced
- 1 20 – ounce package refrigerated, diced potatoes
- 1 cup corn
- ½ cup chopped onion
- 1 medium green bell pepper, chopped
- 1 cup shredded Colby-Monterey Jack cheese
- ½ teaspoon seasoned salt
- ½ teaspoon pepper

Cook bratwurst over medium heat until no longer pink; drain. Stir in vegetables. Cook covered, 10-15 minutes, until vegetables are tender stirring occasionally. Stir in cheese and seasonings and cook until cheese is melted.

## Marathon Water Heaters

Woodbury County REC is selling water heaters guaranteed not to leak as long as you own your home. So with a lifetime guarantee why wait for yours to spring a leak and get your home all wet or wait until the old one could become a safety hazard. Older water heaters do not operate as efficiently as the new insulated Marathon units. With the Polyurethane insulation wrapped around the water tank reduces energy consumption and standby heat loss.

Marathon facts and requirements:

1. The water heater needs to be installed on Woodbury County REC system in order to qualify for the rebate.
2. All units must be wired to Switch Makes Cents to qualify for the rebates.
3. If unit is a new installation a 85 gallon or larger water heater is required.
4. Lifetime guaranteed not to leak as long as the purchaser owns the home, 15 year warranty for out buildings.
5. The elements and thermostats are guaranteed for six years from the manufacture date of the unit.
6. They have adjustable thermostats for temperature control.

	50 gallon	85 gallon	105 gallon
List Price	\$1150	\$1,825	\$2,040
Rebate	\$300	\$400	\$500
Your Cost	\$850	\$1425	\$1,540

## Crichton Completes Apprenticeship Program

Congratulations Brady Crichton upon completion of the apprenticeship program! Mr. Crichton has documented over 7000 hrs. of training that included both on the job experience as well as written and practical skill evaluations. After completing the final written and hands on skill tests, we would like to congratulate him on becoming our newest Department of Labor approved Journeyman Lineworker!



## Correction On 2023 Ductless Mini Split Rebates

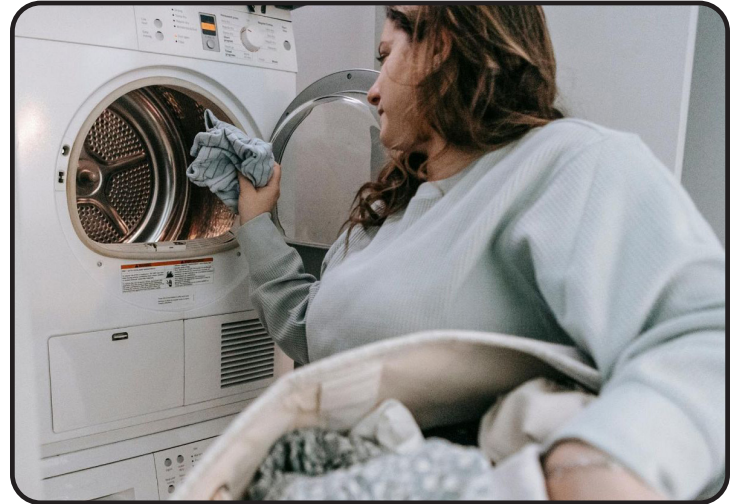
Description	New	Replacement	Maximum Limits
Any type of Ductless Mini Split Heat pump Must be Energy Star Certified			30% Cost Installed
If no back-up heat or back-up heat is propane or natural gas	\$500/Ton	\$500/Ton	No more than
If back-up heat is electric	\$700/Ton	\$700/Ton	&10K/Home

# Understanding Peak Hours

By Kent Amundson

When you look around your home, you likely have more devices and equipment that require electricity than ever before. Our connected lives are increasingly dependent on more electricity to function. At the same time, as demand for electricity rises, Woodbury County Rural Electric Cooperative (REC) must deliver an uninterrupted 24/7 power supply – regardless of market conditions or other circumstances.

As you would expect based on your family's habits, electricity use fluctuates throughout the day based on consumer demand. Woodbury County REC must be able to provide enough electricity to meet the energy needs of all members during times of highest energy use or "peak hours." These peak times are typically in the morning as people start their day and in the evening as people return to their homes.



## Understanding demand

What you may not know is that electric utilities, including our co-op, typically pay more for electricity – either from a power plant or from another utility with excess power – during those morning and evening "energy rush hours." In addition, the demand for electricity is even higher when it's especially cold outside, when heating systems must run longer to warm our homes.

If the "peak times" concept is a bit puzzling, here's an easy way to think about it, and it's similar to a major concert. We know costs go up when there is strong demand for tickets (or electricity), and both are subject to the basic economic laws of supply and demand. When a lot of people want the same thing, it's more expensive. When they don't, it's cheaper – like a bargain matinee or an "early bird" special at a restaurant.

## Take control during peak periods

During peak periods when the cost to produce and purchase power is higher, we encourage you to take simple steps to save energy, such as turning your thermostat down a few notches, turning off unnecessary lights and waiting to use of large appliances during off-peak times.

Woodbury County REC offers Switch Makes Cents which is our load management program. This program is designed to reduce electric demand and help decrease electric cost. If you are not on the program and would like to learn more about or sign up for the Switch Makes Cents please contact our office at 1-800-469-3125 or [helpdesk@woodburyrec.com](mailto:helpdesk@woodburyrec.com).

You can also save energy by plugging electronics and equipment such as computers, printers and TVs into a power strip, then turn it off at the switch during peak hours. If you have a programmable thermostat, adjust the settings to sync up with off-peak periods. When we all work together to reduce energy use during periods of high electricity demand, we can relieve pressure on the grid and save a little money along the way.

Another benefit of this time-of-use approach to electricity use allows greater control over your bill. Reducing the peak impacts the power-supply cost to every co-op member. This is particularly noticeable as energy costs have risen across the U.S. Collectively, everyone conserving energy and making small changes can truly make a difference.

Remember, taking simple steps to save energy throughout the day and shifting energy intensive chores to off-peak hours is a smart choice for you and our community.

**Kent Amundson is the general manager/CEO of Woodbury County REC.**

# How Electric Vehicles Impact the Grid

Last year saw a record increase in electric vehicle (EV) sales, and experts are predicting that by 2035, many major vehicle manufacturers will only produce electric models.

A 2021 study by the Department of Energy showed that increased electrification, or replacement of direct fossil fuel use with electricity, would account for a 38% increase in electricity demand by 2050 and EVs will play a major role in this increased electrification.

The need for more electricity will have a major impact on the nation's grid, which means power supply and grid infrastructure must be carefully planned to accommodate the increased need for electricity.

EV charging presents new challenges in maintaining the electric grid. Fully charging an EV battery requires the same amount of electricity needed to power a home during peak energy use times. However, EV charging is a concentrated pull of energy over an extended period, which can add stress to the local power grid by increasing the amount of electricity a utility has to provide. Additionally, the neighborhood transformer needs adequate capacity to handle the increased load. EV charging can shorten the lifespan of transformers by straining and overloading their capacity if they are not matched to a neighborhood's energy needs.

## Electric Vehicle Charger Rebate

Description	New Rebate	Replacement Rebate	Maximum Limits
Electric Vehicle Chargers Level 2 Chargers: 208-240V Must be hardwired and installed to meet all codes Member required to provide charger make, model, S/N, specifications Cannot back-feed into the system Load Control Switch Required Must have built-in accessible meter or REC/Muni meter installed	50% cost, max of \$750 per charger	N/A	2 EV Chargers per household

Electric cooperatives are currently identifying ways to manage this new pattern of electricity use, though exact strategies will vary based on each utility's unique needs. Analyzing energy load patterns or identifying where and when the local grid has spikes in demand can provide electric co-ops with data on where to place higher-capacity transformers. This analysis can also provide a picture of overall energy use and patterns to help forecast energy consumption for the future. Planning system maintenance and upgrades are also part of that long-range forecasting; however, this has been recently complicated by supply-chain issues with transformers, with wait times that are upwards of one year.

EV owners can play a role in reducing energy costs and system stress associated with charging. Woodbury County REC offers a rebate on level 2 chargers as shown above. Typically charging during the night is strongly encouraged when electricity demand and wholesale energy rates are lower. Charging at night is also a great way to ease demand in your neighborhood.

Another potential change on the horizon is a new energy peak time. EV drivers that plug-in to charge as soon as they return home from work would create even more electricity demand during this busy time of day. But if EV drivers use a timer to schedule charging at night, the electricity demand could be spread over a longer period to reduce stress on the grid. This would be especially beneficial for neighborhoods with multiple EV drivers.

EVs are only expected to increase in number. Electric co-ops and EV owners both have roles to play in accommodating increased demand. If you own an EV please let Woodbury REC know so we can better plan energy demand for you and your neighbors.