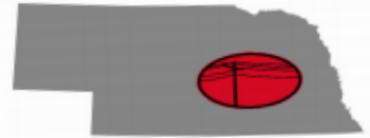


# POLK COUNTY RURAL PUBLIC POWER DISTRICT

'The Livewire'

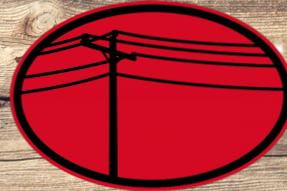
"Committed to enhancing the lives of our customers by providing safe, reliable and economical energy through excellence in customer service and innovation"



December 2019



*From all of us at*



**POLK COUNTY**  
RURAL PUBLIC POWER DISTRICT

*we would like to wish you  
and your family a  
Merry Christmas*

**Andy Roberts  
Barb Fowler  
Charlie Clark  
Cindi Perdue  
Dawn Dudgeon  
DJ Crowell  
Gary Allison  
Gene Urkoski  
James Nocito  
James Papik**

**Jeff Scow  
Jeff Waller  
Jodie Alvis  
Josh Suckstorf  
Judy Rieken  
Justin Sunday  
Mardell Johnson  
Megan Klein  
Mickey Berggren**

**Michel Peterson  
Phil Burke  
Robert Lindburg  
Randy Reese  
Ryan Carlson  
Todd King  
Tony Schnell  
Vernon Kuhnel  
Wade Rahn  
Yancy Krol**

# Clean Diesel Irrigation Pump Rebate

The Nebraska Department of Environment and Energy's 2019 Clean Diesel Rebate Program is now accepting applications for agricultural irrigation pump diesel engine replacements. Applications must be submitted to NDEE by January 17, 2020, to be considered.

Funding will assist farmers with the replacement of irrigation pump diesel engines with electric equipment. Diesel engines may be replaced with an electric motor to power a surface pump or by connecting an existing submersible pump directly to the electric grid. NDEE will reimburse 60% of the cost of the electrical equipment, installation, and required electric line extension up to a maximum of \$20,000. NDEE anticipates funding seventeen irrigation engine rebates.

Engine eligibility is based on the current engine model year and horsepower, as shown in the following table.

Current Diesel Engine Horsepower	Current Engine Model Year
0-50	2006 & Newer
51-300	1996 & Newer
301	1986 & Newer

- The current diesel engine must be in operating condition and have operated at least 250 hours per year over the past three years.
- The diesel engine must be replaced with an electric motor or, if the engine powers a generator that runs a submersible pump, by directly connecting the submersible pump to the electrical grid.
- The replaced diesel engine must be disabled (scrapped).
- NDEE will reimburse 60% of the cost of the electric motor, installation, and/or required electrical infrastructure (including electric line extension) up to a maximum rebate of \$20,000.

- Each operator may apply for a maximum of one rebate for one engine.
- Preference will be given to projects in the following EPA-designated priority counties: Buffalo, Dodge, Douglas, Gage, Jefferson, Keith, Lancaster, Lincoln, Platte, and Scotts Bluff.
- Applications will be evaluated on the basis of the public health benefit and the amount and cost-effectiveness of the emissions reduction (determined by NDEE from the annual hours of operation, fuel use, and estimated remaining years of service of the replaced engine).

More information and application materials can be found at: <http://deq.ne.gov/publica.nsf/pages/17-016>.

Should you have any questions, please contact the Nebraska Clean Diesel Rebate Coordinator at (402) 471-4272 or [NDEQ.airquality@nebraska.gov](mailto:NDEQ.airquality@nebraska.gov).



**Thermostat Reminder**

Your heating system works harder when the outdoor temp drops. Adjust your thermostat to the lowest comfortable setting.

The graphic features a large orange circular thermostat dial with the number 68 in the center and a white arrow pointing downwards, indicating a temperature adjustment.

# The difference a **bulb** makes

Just how much difference does choosing a different kind of light bulb make on how much you spend on energy? Here's a quick comparison of key stats about incandescent, compact fluorescent (CFL), and light-emitting diode (LED) bulbs.



	INCANDESCENT	CFL	LED
<b>Brightness</b>	800 lumens	840 lumens	840 lumens
<b>Energy used</b>	60 watts	13 watts	9 watts
<b>Cost per bulb*</b>	\$1.49	\$2.49	\$1.37
<b>Yearly energy cost**</b>	\$7.55	\$1.64	\$1.13
<b>Estimated lifespan</b>	1.8 years (2,000 hours)	11 years (12,000 hours)	13 years (15,000 hours)
<b>Total cost over 10 years</b>	\$83.78	\$18.89	\$12.67

## #PublicPower

\*Prices quoted all come from the same large retailer for comparably sized and style bulbs

\*\*Assumes use of 3 hrs/day at average public power bundled rate of 11.5 cents/kwh

Considering the average home uses about **40 bulbs**, the difference for one home **over 10 years** is more than **\$2,800** in cost savings, and more than **22,000 kilowatt hours** in energy savings.

# 10 Quick Tips to Avoid High Winter Bills

Looking to lower your bills this winter? Use the 10 tips below to conserve energy.

**1** Seal air leaks and insulate well to prevent heat from escaping and cold air from entering your home.

**2** Reduce waste heat by installing a programmable thermostat.

**3** Turn off lights when not in use.

**4** Lower your water heater temperature. The Dept. of Energy recommends using the warm setting (120 degrees) during fall and winter months.

**5** Unplug electronics like kitchen appliances and TVs when you're away.

**6** Open blinds and curtains during the day to allow sunlight in to warm your home.

**7** Close blinds and curtains at night to keep cold, drafty air out.

**8** Use power strips for multiple appliances, and turn off the main switch when you're away from home.

**9** Wash clothes in cold water, and use cold-water detergent whenever possible.

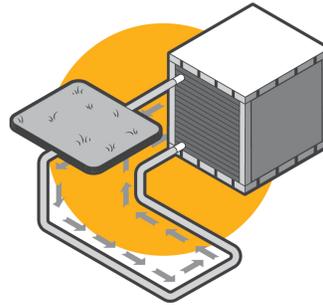
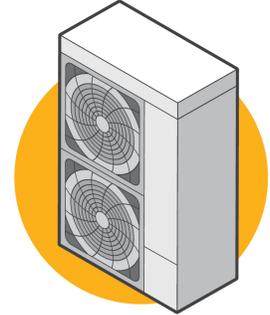
**10** Replace incandescent light bulbs with LEDs, which use at least 75 percent less energy.

# Types of Heat Pumps

There are three main types of heat pump systems. Use the information below to determine the system that's best suited for your climate and home.

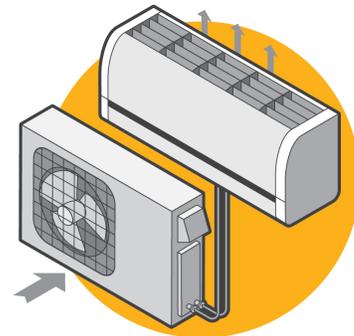
## Air-Source Heat Pumps

- Most commonly used heat pumps
  - Moves heat rather than converting it from a fuel like combustion heating systems do
  - Can reduce heating costs by about 50 percent when compared to baseboard heaters or electric furnaces
  - Newer, more efficient systems now represent a legitimate space heating alternative in colder regions like the Northeast and Midwest.
- Note:** If temperatures in your area drop below 10 to 25 F, you will need an auxiliary heating system (depending on the size of the system).



## Geothermal Heat Pumps

- More expensive to install but provide more energy savings for heating and cooling
- Move heat through pipes buried underground
- When compared to a conventional heating system, can reduce energy use by 25 to 50 percent
- Effective in extreme climates
- Not ideal for smaller lots and certain soil conditions



## Ductless Mini-Split Heat Pumps

- Easier to install, quiet, small in size
- Flexible for heating and cooling individual rooms and smaller spaces
- No energy loss through ductwork, which accounts for more than 30 percent of a home's energy use for space heating/cooling.
- Installation can be pricey, but federal incentives may be available

Heat pump systems should be installed by a licensed professional. Contact Wade Rahn at PCRPPD for more information about options and potential incentives

Sources: Dept. of Energy and Consumer Reports

# Serving Those Who Served Us

On November 8<sup>th</sup>, in honor of Veterans Day, we took a few hours to prepare a hamburger meal to deliver to some of the Veterans in our service area. The hamburgers were grilled and prepared by our linemen, and the office staff packaged everything together. The linemen delivered the lunch to those who had signed up or had been nominated. We feel privileged to make this gesture to these heroes. To all of those who have served, we thank you and appreciate your sacrifice for our country.



Left: Mickey Berggren delivers a meal to Jim Laycock in Osceola.



Right: Tony Schnell delivering a meal to Donald Fuhr north of Stromsburg