

THE WIRE

CURRENT NEWS FROM THE ELKHORN RURAL PUBLIC POWER DISTRICT

November 2015

Serving the Elkhorn River Valley since 1940

Volume 24, Number 11

ERPPD is dedicated to providing **SAFE, RELIABLE, COST-EFFECTIVE** electricity for **ALL** customers.

THANKFUL FOR ELECTRICAL VALUE

Electricity:

Best Energy Value.

As we count our blessings this Thanksgiving, we can include having electricity provided by public power districts.

Electricity has become essential in our lives as it heats our homes, refrigerates and cooks our food and runs our numerous appliances. Here in the United States and specifically in Nebraska, we are blessed with getting a lot of power for comparatively little cost.

The Nebraska Rural Electric Association released a video in October about what you can get for 10¢ in a Working for Nebraska piece.

For 10¢ you get 1000 Watts of electricity. It is amazing what 10¢ of electricity will do - run your air conditioner for an hour, charge your cell phone for a year, run 3 loads of laundry and run your laptop for 20 hours and more! You will want to view this video by visiting erppd.com and clicking on the link on the right side of the page.

Electricity has been and remains a good value. Since 1936 electric rates in Nebraska have only increased 5 cents per kilowatt hour of electricity. In addition Nebraska's electric rates are 15% less than the national average.

What are YOU

Thankful for?



This is because we have something else to be thankful for - publicly owned power districts, municipal utilities and electric cooperatives. The customer has a say, directly or through elected representatives, in the decisions that affect electric rates. There is no profit motive in providing electricity to our customers; our rates are cost-of service. You are only charged what it costs to generate and deliver power to you. We work for you to bring you safe and reliable electricity.

You are also an integral part of keeping costs down. By purchasing energy efficient appliances, helping to reduce peak time loads and managing your own usage, it delays having to build new power generation stations or having to

purchase power at a higher price through the market.

Another blessing is that service comes from your friends and neighbors in your community and you know that you can count on us to make sure your lights stay on.

We are thankful that we get to serve our customers and have a positive impact on the communities that we serve. Happy Thanksgiving from all of us here at Elkhorn Public Power District.

Did you know?

That on average Nebraska homeowners spend \$3.52 per day on electricity because they are served by nonprofit utilities?

--Source NPPD

GRASSROOTS - CLEAN POWER PLAN

EPA Clean Power Plan

The Environmental Protection Agency (EPA) finalized the Clean Power Plan and announced the ruling on August 3, 2015.

The energy industry and others have been analyzing what the effects of drastically reducing greenhouse gas emissions would have on the economy.

Dr. Ernie Gross, professor of economics at Creighton University, expressed concern about the detrimental effects of government regulations on incomes and economic growth in a blog.

Plans to reduce and, ultimately eliminate, coal-fired electricity generation in the US will dramatically impact the economy, especially in rural areas. Energy generated from coal fired plants, according to data from the Department of Energy, costs \$38 per megawatt-hour to produce as compared to \$106 from new wind facilities.

Dr. Gross argues that this will contribute to rising economic burdens on low income families in the US as they already spend five times more on electricity than

high income earner families.

Regulations also stymie economic growth. Gross found “distinct relationships” between the least regulated states and the most regulated states and economic growth. The 25 least regulated states had a 4.2% GDP growth for 2008-13; compared to the 25 most regulated states that had 3.3% GDP growth.

You can read his blog at <http://economytrends.blogspot.com/2015/09/more-government-regulation-generates>.

Paul Wesslund with the National Rural Electric Cooperative Association (NRECA) wrote in a recent article that such significant changes will demand major new investments in the nation’s electricity transmission system. It would require retiring coal fired generation plants and connecting renewable energy sources to the grid.

The impact of this would be job loss and increased utility bills because of the increased costs for renewable energy sources and infrastructure investments.

See the graphs below on what changes are expected to be made by 2030 to comply with the Clean Power Plan. Carbon emissions are expected to be reduced by 32% nation wide. Nebraska is expected to reduce emissions by 40% by increasing renewable sources and decreasing coal fired electrical generation.

As was reported in the September issue of The Wire, the Clean Power Plan will also effect reliability and possibly not have the impact suggested, since clean air is a global issue.

Call to Action

You can join in the Nebraska Rural Electric Association’s (NREA) campaign to delay the enactment of this rule, by going to erppd.com and clicking on the Grassroots icon to the left of the page. That will take you to the NREA’s website where you can sign up to send e-mails to the president.

We are asking the president to delay the implementation of the Clean Power Plan until courts can rule on this issue.

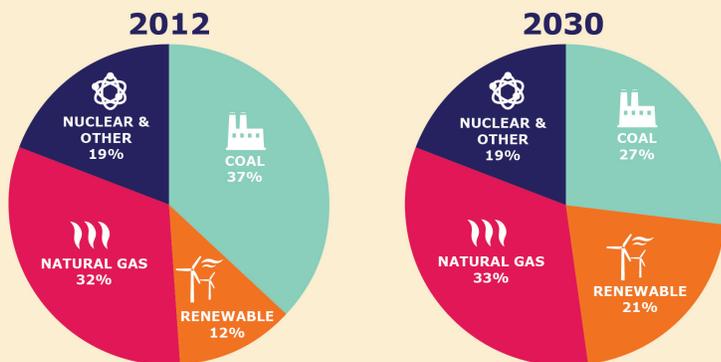
Nebraska is part of a coalition of states that have filed a lawsuit against the EPA and the provisions of this new rule. Waiting to enact the plan until the courts have ruled will help to avoid costly and perhaps irreversible decisions.

Let the president know what you think about increased energy costs, decreased reliability and job losses in your community.

You can make a difference today.

The EPA’s new plan would reduce coal and increase renewables to generate electricity

The charts below show the most recent figures for the fuels used to generate electricity in the U.S., compared with what the Environmental Protection Agency projects will be the mix under its Clean Power Plan. The plan calls for a 32 percent reduction in carbon dioxide emissions from all power plants by 2030. Renewables include hydroelectric power.



Source: Environmental Protection Agency



SAFETY NEWS

Safety Preparation

With winter coming on and the chance for outages due to ice, blizzards, or accidents, it is best to be prepared.

There is a lot of material on the web about what to do in case of a natural disaster or emergency. You can visit Elkhorn's web page at erppd.com and go to the safety tab for links to good sources of information. Standard precautions include having enough water and non perishable food on hand for 3 days. This would include having enough medications or other necessary supplies. Also, having a plan for alternate power and heating if needed.

It is especially important to be prepared if you or a loved one has medical needs that would be compromised with a prolonged absence of electricity.

Elkhorn does have a "notice of power requirement" list that is used during planned and unplanned outages. Elkhorn will notify customers that have medical conditions that utilize machines such as oxygen or c-pap of planned outages. If you would like to sign up, please contact the office by dropping by or calling (402) 675-2185.

We will provide or mail a form to be filled out by your doctor, stating your medical need for electrical services, and returned to Elkhorn Rural Public Power District.

Even though outages with Elkhorn are rare, we will work with you to help you prepare for any disruptions to your service that might occur.

Safety Demo Trailer

Do you know how to be safe around electricity? Especially high voltage electricity? Elkhorn Rural Public Power District works hard to get that message out to our customers and the public. One way we do that is to provide safety demonstrations for the public on the hazards of high voltage. We, along with five other districts, have a High Voltage Safety Demo Trailer.

Recently Elkhorn staff went to Madison, NE, for the Volunteer Fire Department open house.

With the trailer, we demonstrate how high voltage can be conducted through different mediums that might come into contact with the lines.

One of the favorite demonstrations is putting current through a hotdog. The hotdog starts smoking in seconds and explodes. The interesting part is that the outside of the hotdog stays cold. High voltage acts a bit like a microwave and "cooks" from the

inside out.

During the demonstration, we explain about the different equipment and how it is used to keep staff and the public safe around electricity. Breakers, known as OCR's are activated when something comes in contact with the line. The OCR trips up to three times and if the line is not clear then it stays open and there is no electricity to the line and creates an outage. This keeps the lights on for minor disruptions on the line.

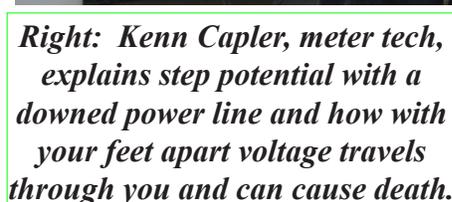
Staff also explain about what to do if there is a downed power line. It is very important to maintain a safe distance, as it is impossible to tell if the line is energized or not. If you are in a vehicle or near a down power line, do not run away or take big steps.

With your feet apart you become a conductor between different voltage levels. Voltage dissipates like ripples in a pond away from the source of the electricity.

continued on page 4



Left: Jim Wennekamp, Journeyman Lineman, demonstrates how a hotdog is "cooked" inside out with high voltage



Right: Kenn Capler, meter tech, explains step potential with a downed power line and how with your feet apart voltage travels through you and can cause death.

continued from page 3

Safety Demo Trailer

If you bridge two different levels of voltage, current runs through your body and this is what generally causes death. Keep your feet together and hop away from the downed line.

If you are in a vehicle and it has contact with a downed line, it is important to stay in the vehicle until ERPPD staff can come to turn off the power and help you to safety.

If there is a fire or some other emergency that would indicate a need to leave the vehicle, jump clear of the vehicle without touching it and with your feet together hop away.

The Safety Demo Trailer is a great way to communicate safety around high voltage power lines. If you would like us to provide this for an open house or other event, please call the office at (402) 675-2185.

75th Anniversary

Cookbooks Available

Need a stocking stuffer for Christmas? Elkhorn Public Power District has 75th Anniversary Cookbooks available.

The cookbooks are \$5 a piece.



Cookin' with POWER

Stop by and pick some up or you can call the office to reserve your copies.

Energy Efficiency Tip of the Month



Reduce energy for water heating. Take simple steps like lowering your water heater's temperature and installing low-flow showerheads to reduce your water heating bills.

Source: energy.gov

Basics of Electricity

Electricity is something we use every day, but it can be hard to understand as it is only something you can see the effects of. Below is a visual aid that compares electrical terms to how water is delivered to your home.

Voltage - The pressure to push electricity in a circuit

Ampere - (Amps) The unit of measure for electricity flowing

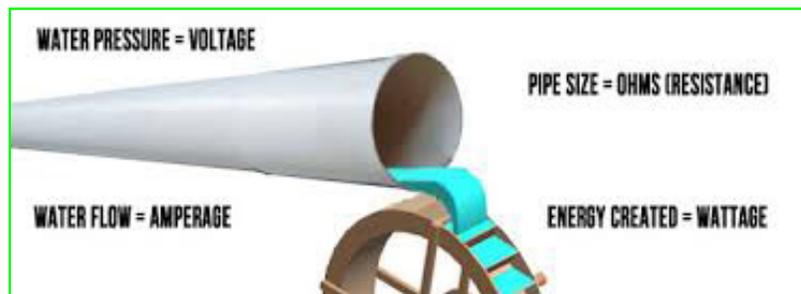
past a given point or amount of electricity used.

Ohm - the unit of measure for the resistance in a circuit.

It takes one volt to push one amp through one ohm of resistance in a circuit.

A **Watt** is a measure of the work or expending energy similar to horsepower.

One watt of power equals one volt of pressure times one ampere of current.



Elkhorn Rural Public Power District

will be closed

Thursday & Friday,

Nov. 26 & Nov. 27,

to celebrate the

Thanksgiving weekend.

