

## Acceptance of Wind Energy Project

by Jamey Pankoke

When the wind is blowing, energy may soon be flowing to Perennial Public Power District. At their meeting in December our board of directors accepted a price proposal from Bluestem Energy Solutions, a Nebraska based energy development company, for the purchase of the electric energy output from 6.9 megawatts (MW) of wind generation. If Bluestem obtains all the necessary permits and zoning approvals needed in construction, the energy will be produced by three 2.3 MW wind generators that will be built on a site approximately one and a half miles west of Fairmont along Highway 6.

While going through the process of informing the public about this project, I've been asked why we are doing this. Does a certain amount of the energy we purchase on behalf of our customers need to come from renewable generation resources? The answer is no. Unlike some states, thirty-one per the Energy Information Administration, Nebraska does not have a Renewable Portfolio Standard to regulate the production of energy from renewable energy sources, such as wind, solar, biomass, and geothermal.

Are we pursuing the purchase of wind energy to because we want to be green? Well, we certainly want to be environmental friendly in everything we do. But buying some of the wholesale power that we purchase from a renewable resource wasn't a primary factor in the decision to accept Bluestem's offer. And even though



**Jamey Pankoke**  
General Manager

the efficiency of wind power has increased substantially in recent years, we realize that it is still an intermittent resource. The wind doesn't always blow, although it sure seems like we have very few days where it isn't windy. Yet, most all of you have probably seen big wind generators where the blades are standing still.

The primary driver in agreeing to Bluestem's proposal was related to cost. In short, we want to save money for our customers. Bluestem's price, coupled with the value that we can receive through the sale of energy and wind attributes, such as the renewable energy certificates that we will receive from the project, will save money. In addition, it will provide diversity and a hedge against rate risks associated with the new long-term contract that became effective in 2016 for the purchase of power from Nebraska Public Power District. That contract allows us to buy up to ten percent of our peak load from renewable energy suppliers. To give the project with Bluestem some perspective as to how much of our total load it will serve, the District's peak load is 100 MW. So, 6.9 MW of wind energy doesn't pose a great risk. In fact, in our estimation the annual amount of energy that we will buy from Bluestem will equate to less than 8% of the total that we purchase for our customers for a year.

As far as the construction timeframe is concerned, Bluestem has already done some preliminary dirt work at the site. However, we are still in the process of

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# 2017 EnergyWise Program changes

**D**id you make a New Year's resolution to be more energy efficient? If so, Perennial has a rebate program for you. Our EnergyWise programs help you make energy efficient improvements within your home or business. The EnergyWise incentives have been updated for 2017 in response to the latest industry trends. The purpose of the EnergyWise program is to encourage customers to adopt new energy efficiency standards.

## Residential Incentives

### New Program: Heat Pump Water Heater

Incentive amount: \$200 - \$500

Air source heat pump water heaters with an efficiency factor greater than 1.9. \$200

Ground source heat pump water heaters with an efficiency factor greater than 2.8. \$500

### Attic Insulation

Incentive amount: \$0.15/square foot (max. \$300)

Attic insulation may qualify when six or more inches are added to an existing amount of less than six inches.

Must have a heat pump, electric furnace or permanently installed electric heat (baseboard, radiant, etc.)

Rebate applied to existing homes only; excludes new construction.

### Cooling System Tune-Up

Incentive amount: \$30

Qualifying systems include residential central-air conditioners, air source and water source heat pumps that are inspected and tuned-up by an HVAC (heating, ventilation, air conditioning) contractor.

Customers are eligible for the EnergyWise \$30 incentive every three years.

Rebate will be applied to your account in the form of a bill credit.

### Irrigation Pump Efficiency

Incentives are available to any eligible electric irrigation pumping account holder for refurbishing/replacing inefficient pumps 20 HP or greater. Please contact the us for more information.

## High Efficiency Heat Pump

Incentive amount: \$200 - \$1700

The following incentives are available for homeowners:

15 SEER HP, 12.5 EER, 8.5 HSPF \$200

16-18 SEER HP, 12.5 EER, 8.5 HSPF \$400

18+ SEER HP, variable capacity,  
12.5 EER, 9.0 HSFP \$600

Water/ground source HP- 1 or 2 stage, Any EER \$1200

Water/ground source HP, variable capacity, 35+ EER,  
5.0+ COP in GLHP- partial load column of AHRI or  
Energy Star certificate \$1700

\*An AHRI or Energy Star certificate is required for all 15+ equipment meeting the above requirements.

## Commercial Incentives

### Prescriptive LED Lighting

High, low bay and exterior dusk-to-dawn:

9-65 watt LED \$20

66-130 watt LED \$40

131-240 watt LED \$60

LED Exit signs, under 8 watt \$10

Linear replacement or retrofit LED:

11-22 watt LED \$5

23-45 watt LED \$10

46-68 watt LED \$15

69-90 watt LED \$20

Freezer/refrigerator case lighting (4'-6') \$20

Occupancy sensor \$15

10-15 watt PAR 30 LED retro kit \$5

12-26 watt PAR 38 LED retro kit \$5

### Commercial HVAC Incentive

A variety of incentives are available if you are updating commercial heating and cooling systems. Minimum cooling efficiency (SEER) is 15 and the minimum heating efficiency (HSPF) is 8.5. Program details are available on our website: [www.perennialpower.com](http://www.perennialpower.com).

# Wind Energy Project

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negotiating the terms of a Power Purchase Agreement with them and until it is completed, only then would the project move into the final construction phases. Construction is slated to be finished late this year. Likely, it will be 2018 before the generators are in full production.

I'm sure there will be questions about Perennial being involved in the wind energy business. During their discussions on this matter, the board of directors stressed the importance of our customers and the public being kept informed. So, if you have any questions at all, please don't hesitate to contact me.



Let's  
talk  
value

The average Nebraska homeowner pays about \$3.56 to keep the lights on, the appliances running, and the room temperature perfect for 24 hours. A drive-thru meal costs more than that. Affordable energy costs benefits everybody, and that's what public power is all about.



402-362-3355  
[www.perennialpower.com](http://www.perennialpower.com)



## Operations Report

### Distribution Projects:

As we start a new year, Perennial crews are constructing the Fortigen Substation east of Geneva, replacing poles in York County, and continuing to clear R.O.W. in the villages that Perennial serves as well as rural areas. Crowl Tree Service is expected to work on tree trimming in the Village of Exeter during the months of January and February

**Reminder:** If you are considering a new service whether it is a house, business, irrigation service, etc. please keep Perennial in mind when considering your project. It is very helpful if we are involved from the onset to plan the work and to have time to order special materials that may be needed to complete your project.

### Sub-Transmission Projects:

Crews will be installing the sub-transmission taps into the Fortigen Substation located east of Geneva.

### Irrigation deadlines:

**March 15, 2017**

Are you planning on a new irrigation service in 2017? If so, please notify Perennial before March 15, 2017 so the work can be scheduled.

**April 15, 2017**

Irrigation load control deadline.

## Efficiency Tip

Energy

A crackling fire in the hearth warms the house, but don't let it heat up your electric bill! Caulk around the fireplace hearth and keep the damper closed when a fire is not burning.

Source: U.S. Department of Energy

## Stay Safe Around Downed Powerlines

Winter months can bring snow, ice, and windy conditions, which create additional hazards for drivers. Should an accident occur, it is important to be prepared. Automobile crashes always present danger, but when electricity is involved, the decisions made in the moments after the accident are especially crucial. Here are some tips to keep you safe this winter.

Perform regular maintenance on your car to check that batteries are charged, tires have sufficient tread, and windshield wipers are in working order. In case of an emergency, pack a kit that includes blankets, flares, a flashlight, and a window scraper. If you are stranded in your car after an accident, watch for signs of frostbite or hypothermia. Do not stay in one position for too long, stay awake, and do not overexert yourself as this could put strain on your heart.

Due to the potential for a winter storm to bring down power lines, individuals should only venture outside if absolutely necessary. Slow down when driving in icy conditions, and always keep your eyes on the road to look out for hazardous conditions or downed power lines. Also watch for debris near down poles and lines, as it may be energized as well.

If you see a car in an accident with a power pole, your first instinct may be to rush toward the vehicle to offer help. Always remember to keep your distance from the vehicle and all electrical equipment that has been damaged. Instruct those in the car to stay inside until the power has been shut off.

If you must exit the vehicle because it is on fire, jump clear of it with your feet together and without touching the vehicle and ground at the same time. Keeping your feet together, shuffle or “bunny hop” to safety. Doing this will ensure that you will not have different strengths of electric current running from one foot to another.

Keep in mind that a downed line does not need to be sparking to be energized. It is best to assume all low and downed lines are energized and dangerous.

Never drive over a downed line because that could pull down the pole and other equipment, causing additional hazards. If you see a downed line, do not get out of your car. The safest place is inside the vehicle. Contact 911 to have the utility notified immediately.

For more information on electrical safety, visit [SafeElectricity.org](http://SafeElectricity.org).

402-362-3355  
800-289-0288  
402-362-3357- Outages

**Perennial Public Power District**  
2122 South Lincoln Avenue  
York, NE 68467

Office Hours  
7:30 a.m. ~ 4:30 p.m.  
Monday ~ Friday

## STEP POTENTIAL



### What you need to know:



A downed line does **NOT** have to be arcing or sparking to be energized — and dangerous.



Even if you do not touch lines or equipment, you can still be killed or seriously injured.



The **danger** exists **beyond** the point where the downed line is making direct contact with a vehicle or the ground.

Electricity can flow **360°** around it.

#### What is step potential?

If a person connects **two different points** of this gradually decreasing voltage by walking away, stepping out of a vehicle, or touching the vehicle and ground at the same time — electricity flows through the individual (path to ground).



#### Stay safe.

If you're in a car accident that involves downed lines, **stay in the car**. If you come upon a scene with a downed line, stay far away and **call 911** to have the utility notified.



Learn more at

**Safe**  
Electricity.org