

Answers to common questions

Q - Why is it that sometimes I lose power and my neighbor doesn't?

A - You could be on a different phase or maybe even a totally different circuit. You could have a problem specifically at your location, like a wire down in your yard or an overloaded transformer. Generally the first answer fits most situations.

Q - Why so many phases (wires)

A - The electricity that feeds your home or business, originates from one of the District's substations. There are generally three to four circuits coming out of each substation that branch off into different directions and serve the customers in an area. Each circuit has three wires (or phases) plus a neutral wire.

Part of the reason for three phases is so we can serve three-phase power for irrigation motors or grain drying motors or other industrial services. The other reason is so that we can balance the load on our system. Each of the three phases in a three-phase circuit must be loaded evenly to make the system operate efficiently.

Often times the phase you are connected to, is determined by the location of your transformer on the pole. If your transformer is at the road on a three-phase circuit, you will likely be connected to the center phase. Likewise, if your transformer is located in the farmyard, you will likely be connected to the closest outside phase. If

you have an irrigation pivot, you could be connected to one or even two of the phases. If the pivot uses an electric well, you will most likely be connected to all three phases. If you have a house, you probably only need one phase, unless you require three-phase service for grain drying, etc. Then, like an irrigation well, you will need all three phases. Perhaps you are already seeing why you could be out of power when your neighbor isn't.

Q - What causes my lights to blink?

A - Many things can cause a line to blink, but first we must look at why a line is designed to blink. Each individual phase in a three-phase circuit is protected by a circuit breaker. Much like the circuit breaker or fuse in your house, these breakers are designed to protect our lines in the event of a short circuit. The big difference between our breakers and yours, is that our breakers will automatically reset themselves three times, before they trip off and shut off the line. If our breakers didn't work that way, you would be out of power every time a tree limb or other object brushed into the line. Instead, you just see a momentary blink. During a lightning storm or a windstorm, you could experience several blinks. Your lights will probably stay on, but the downside is that every time you experience a blink due to wind, lightning or trees, our line is experiencing some sort of

damage. This damage could cause a power outage the next day or the next month. It might even fail in the middle of a calm day and leave everyone wondering, 'what happened?'

When you think about all the elements that power lines are exposed to, you might wonder why they don't blink all the time. Well, a lot of thought goes into the design of an electrical system. A couple of simple things for instance, are that poles need to be a certain height to keep tall machinery from coming in contact with the wires. Lines must also have a certain amount of separation between them, so they won't slap together easily when the wind blows. Still, we cannot control everything, and things will happen. When they do, a circuit breaker, when operating properly, will either blink the line or shut the line completely off.

Q - I know my neighbor and I are on the same phase, so why is it that my lights are blinking and theirs aren't?

A - There is a problem somewhere between the primary connection of your transformer and the wiring in your house. Either way, we need to be contacted to check it out. In this case, only your service would be affected.

Q - You told me that my lights were blinking because of trees in the lines, but there are no trees in this area.

A - Remember we talked about circuit breakers? The circuit breaker that protects your line could be 5 miles

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Can wind claims stand up to reality?

The American Wind Energy Association (AWEA) makes the claim that Nebraska is ranked 4th in the US as a potential wind power resource. Number one is North Dakota. Most Ne-



by Jamey Pankoke

braskans are environmentally focused with a desire to go 'green'. Some even think that wind farms can save the day! Let's see how wind claims stand up to common sense reality.

It was recently reported that 79 percent of Nebraska voters favor requiring electric utilities to use renewable energy sources for at least 20 percent of the power they generate. The basis for this conclusion was a poll that was conducted by the Center for Rural Affairs, AWEA, and Wind Coalition and Energy Foundation. As you might guess, these organizations are strong advocates for federal renewable portfolio standards, in other words, a policy that requires those who sell electricity to have a certain percentage of renewable power in their generation mix. When we talk about renewable energy in Nebraska we really mean wind power.

I don't know whether the poll questions were phrased in a way that led to overwhelming support of those polled to favor such a large portion of power coming from renewable energy or wind power, but I'm guessing the poll respondents were not made aware of the fact that there are substantial cost considerations involved when incorporating wind into the generation mix – costs the respondents will eventually have to pay.

In addition to the high capital costs of wind farms by themselves, other costs including the millions of dollars for new transmission lines that need to be built when wind farms are far from where electricity is ultimately consumed, the cost of government subsidies, the addi-

tional operating costs of the other power plants that need to respond to the significant variability and unpredictability of electricity from wind, and the extra power that generating companies would need to set aside in reserve to meet reliability requirements. These items all need to be accounted for. On top of this, the useful life of today's wind turbines, as well as their lifetime operation and repair costs are unknown. The point of these factors is Wind will definitely drive up electric bills, which is contrary to one of the reasons given by the Center for Rural Affairs as to why poll results turned out the way they did. That is, concern over rising energy prices was cited as one issue that drove support for the 20 percent renewable standard. The other issue was the nation's dependence on foreign oil. Since gas fired plants can more quickly respond to rapid fluctuations in wind output we'll likely increase our reliance on Natural Gas putting ourselves at risk of depending on foreign supplies when domestic supplies no longer meet demand. These issues should be challenged.

Consider that Nebraska wind turbines are expected to generate about 30% (avg. of 20/40%) of the time. To make up the balance, energy is generated by fossil, gas or nuclear plants. Using 30%, one might assume, to replace one 1,000 MW plant you would need 2,000-3,000 wind turbines. Given that the wind at times may have velocities less than what is capable of turning the rotors, in which case no number of turbines can replace the 1,000 MW plant, and if you want electricity at those times, then you have to have that plant remain on standby.

NPPD is investing in wind as a potential hedge to climate change or environmental legislation. NPPD has a strategic goal of generating 10 percent of its electricity from renewable resources by 2020, so they will continue to develop renewable resources. Without question wind energy will be a piece of our energy solution, but it will not come without a

cost. When contemplating how much wind power to install, we need well thought out and reasonably priced options.

Attention irrigators!

By now you should have received the annual horsepower bills for your irrigation services. The deadline to pay these bills was June 5th.

Changes in 2010

Starting this year, instead of being billed for your irrigation energy use at the end of the season, you will be billed in August, September and October.

Load control messages on KRVN

Again this year, Perennial will have daily irrigation load control messages broadcasted on KRVN 880 Rural Radio. Messages will be read at 8:29 a.m. Mon-Sat. If load control is expected, the radio announcer will say "Code Red" followed by a starting time for load control.

Load control hours

The potential hours for load control are from 9 a.m.- 11 p.m. However, the maximum amount that any irrigation well will be controlled between the 9 a.m. - 11 p.m. time-frame is 12 consecutive hours. The starting and stopping time can and usually will change from day to day.

Sundays will again be a day when load control is possible. The good news is that if you are controlled on Sunday, it can only be for six hours. Also, the maximum amount that any group can be controlled throughout the entire week is 72 hours. This will only affect the anytime control groups.

Load Control Contact Information

Hot-line: (402) 362-4786

Office: (during regular business hours of 8:00 a.m to 5:00 p.m. M-F) (402) 362-3355

Service Calls: 24 hours a day (402) 362-3357 or (800) 289-0288

Website: www.perennialpower.com

Continued from page A away. Your circuit breaker's job is to protect the entire line from anything that happens. So, the trees could have been right in front of your house or five miles away. The circuit breaker will react the same way in either case.

Report all problems

If you experience blinking lights, report it to us right away. Your information will often times help us fix a problem before it causes an outage.

Outage caused by equipment failure in NPPD substation

On Wednesday, May 5th, 2010, at 7:58 p.m., Perennial PPD customers as well as NPPD customers in York, experienced a wide spread outage. This outage encompassed a general area west of Highway 81 from Geneva to Grafton and north to Highway 34. The outage occurred when a piece of equipment failed in NPPD's 115kV York Southwest Substation. 2,000 customers served by Perennial's Henderson, McCool, Grafton and Charleston substations lost power. Service was restored by transferring this load to the NPPD McCool 115kV Substation and all of Perennial customers were back on at 8:35 p.m.

AMI Update

We continue to make progress installing our new Automated Metering Infrastructure (AMI) system. The installation is about 95% complete and we plan to have it fully implemented by the end of the summer. When completed, consumers will no longer be required to read their own meters.



When that time comes, we will make a formal announcement. Until then, please continue to send in readings and the date you read the meter, in the space provided on your bill. If there is no space provided for a reading, then we are already reading your meter for you.

In addition to retrieving kilowatt-hour data from the meter, we will be able to read minimum and maximum voltages and outage data, which will help us know where power outages are occurring in the event of a storm. The new meters also store momentary outages or (blinks), which will help us pinpoint loose connections or damage from previous storms before they causes an outage.

The new single-phase meters can store up to 150 days of kilowatt data. This has already been helpful in resolving high bill concerns from some customers, by using the ability to go back and see how much electricity was used in a particular day, hour or even a 15 minute period of time.

WE NEED YOUR HELP.



Act now to prevent increases in your electric bills.

Congress is responsible for determining any climate change legislation -- it should not be left to the Environmental Protection Agency to determine.

The Environmental Protection Agency (EPA) is currently considering proposals to regulate greenhouse gas emissions under the Clean Air Act. The author of the Clean Air Act stated this would result in a "glorious mess" as it was never intended nor designed to regulate these emissions.

It is the responsibility of Congress to determine any climate change legislation, not EPA.

Tell Congress that they need to step in and prevent EPA from using the Clean Air Act as a tool for reducing greenhouse gas emissions. It's the role of Congress to determine greenhouse gas policy that is fair and affordable for all Americans.

Let us do the work for you. Please provide us with the information below and we will send the following letter on your behalf. You will receive an official response back from your representative. If you provide an e-mail address, you will also receive timely updates about upcoming legislation that will effect your electric rates.

If your U.S. Representative or U.S. Senator already supports legislation to prevent EPA from regulating greenhouse gas emissions, a "thank you" message will be sent to them. Below is the letter:

Dear Senator or Representative:

I urge you to support any legislation keeping the EPA from using the Clean Air Act (CAA) to regulate carbon dioxide from power plants. The Act was never intended to regulate greenhouse gases. Even the author recognizes it is the wrong tool for the job, observing that its use would result in a "glorious mess" of regulation and litigation.

Using the CAA to regulate greenhouse gases will undoubtedly increase my electric bill in what are already difficult economic times. Please act now to keep my bill affordable.

Signature _____

Name (Please Print) _____

Address _____

City _____ State _____ Zip _____

E-mail _____

Community Calendar

Geneva Farmer's Market (Every Tuesday)
Henderson Farmer's Market (Every Tuesday)
York Farmer's Market (Every Thursday)
June 11-13 - Milligan June Jubilee
June 12 - Henderson Community Garage Sale
July 2 - Milligan Czech Brass Band & National Guard Band - Free admission, food available 5:00 p.m.
July 3-4- Geneva - Celebrate Patriotism
July 9-10 - Henderson Community Days
July 10 - Gresham Fireman's Picnic
July 16-17 - Waco Western Days
July 24 - Exeter BBQ & Street Dance
August 13-15 - Benedict Days Aug 14th is Alumni Banquet



**Clean energy
for future
generations.**

Wind is an important part of our power supplier's energy mix. As your utility, we support cost-efficient, development of wind-powered generation, but wind is variable and does not produce electricity 24/7. Other generating resources — like coal and nuclear — will remain necessary.



Students to attend Youth Energy Camp

Two area high school students will be attending the NREA Youth Energy Camp at Halsey, NE July 19-23.

Blake Papik, son of Doug and Melanie Papik of rural Exeter, is a freshman at Exeter-Milligan School. Also attending will be Alex Hinz, who is the son of Eric and Laurie Hinz of rural Bradshaw. Alex is a junior at York High School.

This annual event, sponsored by the Nebraska Rural Electric Association and its 35 member systems (including Perennial) is set in the beauty of the Nebraska National Forest at Halsey. The camp program offers each participant the opportunity to grow socially and learn something at the same time. Through interesting workshops, fascinating demonstrations and presentations by regional experts addressing the many issues affecting the rural electric program, the students will leave camp after five days far more knowledgeable than when they first arrived. There will also be plenty of time for playing volleyball, basketball, canoeing, dancing, socializing and meeting new friends.



Blake Papik



Alex Hinz

Landlord and Tenant

This article is to emphasize that both landlord and tenant need to contact Perennial for electric service changes.

All tenants are required to sign an application and pay a deposit or provide a letter of credit in lieu of a deposit prior to having electric service connected. It is the responsibility of the landlord and the tenant to contact Perennial when the rental agreement has expired or new rental agreement has been entered into. This will assist Perennial in identifying who will be responsible for electric service. This avoids the inconvenience of electric service being disconnected if the tenant contacts Perennial and request service to be disconnected.

The landlord must also call Perennial. The landlord would be required to pay a reconnect fee to have service reconnected and put back in the landlord's name if service was disconnected.

The process that Perennial will follow for apartment and house rental is when a tenant calls to have service cancelled or taken out of their name the service will be disconnected. Again it is important that both the landlord and the tenant contact Perennial to avoid any confusion of responsibility or interruption of service.