

# North Central's News

*Delivering a difference to parts of Knox, Antelope, Pierce, and Holt Counties Since 1945*



*Thoughts and Comments from General Manager Keith E. Harvey*

## Some interesting insights into a “bomb cyclone” and a look at forces at play in the U.S. 2018 rural economy



Sometime on or about January

18, 2018, a “bomb cyclone” moved across the eastern United States and played havoc with the inhabitants of that geographical area. A “bomb cyclone” – really? I realize that it is hard to maintain 24/7 interest in the weather, so a bit of hyperbole is probably to be expected. I researched into what “bomb cyclones” really consist of and discovered they are actual occurrences – and not necessarily rare – that are real meteorological events. But they are referred to as explosive cyclogenesis and then, I believe, that they were transformed by some word-smith working for a weather channel somewhere into a bomb cyclone. The definition of explosive cyclogenesis is when a low pressure system has its central atmospheric pressure drop by 24 millibars in 24 hours. Normal atmospheric pressure is 1013.2 millibars and a 24 millibar drop puts it into the 900s and that is truly a fairly low pressure. The lower the pressure of the storm, the higher the winds and the stronger the storm.

Whatever one calls this storm it did bring to light some concerns about

the reliability and resiliency of the electric grid under the stress of such an event. Reliable means that adequate supplies of electricity are available on a day-to-day basis at all times of the day. Resiliency means it is able to withstand catastrophic events. The generation assets that provide these characteristics are coal-fired, nuclear and natural gas. However, in the past few years coal-fired and nuclear are being shut down and wind, solar and natural gas are being built to replace

them. Since 2010, generation from natural gas has increased 40 percent, wind by 140 percent and solar by 2,700 percent. Wind and solar provide little of either reliability or resiliency as they are intermittent in their generation capabilities. Natural gas has recently been targeted by NERC (North American Reliability Corporation) with 17 vulnerability issues that include a sobering warning about the risks associated with relying too

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## Years of Service Awards



Receiving Years of Service Awards are Bob Coutts, 25 years; Teri Detlefsen, 5 years; Matt Fritz, 15 years; NCCPD Board members Mary Ketelsen, 10 years; and William Jedlicka, 20 years.

## *"bomb cyclone" ....*

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much on natural gas for reliability and resiliency. One of the major vulnerabilities is that natural gas does not have ways to store reserve fuel on site and as such must count on the supply arriving "just in time" over pipelines. If this supply is interrupted, then the electricity can no longer be generated. "According to NERC, nearly three-quarters of the natural gas-fired power plants built in the last 20 years (one-fourth of the nation's entire electric supply) have no backup fuel source as an insurance policy" (Bailey). Coal and nuclear do not have this problem and have days to weeks of reserve fuel on-site.

To illustrate the problem with natural gas supply as it applies in the real world we can again refer to the recent "bomb cyclone". The demand for natural gas for heating and electricity generation was so high during this storm that the price of natural gas was increased about 60 fold from \$2.93 per million British thermal units (BTU) to \$175 per million BTU. Ouch! The problem is inadequate pipeline capacity to get the natural gas from where it is to where it needs to be. That is sort of Economics 101. And it affected prices well outside of the big demand areas. The Appalachian pipeline hub called Dominion South, which is typically home to the cheapest American natural gas, saw prices jump to \$4.15 per million BTU – that in October of last year was 29 cents per million BTU (Malik). The problem is more complex than just not having pipeline capacity – it is a problem of getting private rights-of-way to construct the pipelines. Many people do not want these pipelines anywhere near them so it helps create a growing supply-side shortage. It will be interesting to see how this plays out over the next few years from an electricity standpoint. All we have to do is look to South Australia with their blackouts and Europe with

their energy issues, to get a vision of where the U.S. may be heading.

The remaining part of this article presents some bullet points taken from a white paper titled "THE YEAR AHEAD: Forces that will shape the U.S. rural economy in 2018" produced by CoBank. The number in parenthesis behind the bullet is the page number from the report. The following are all direct quotations:

- "In Iowa, agriculture accounts for only 10 percent of the state economy. However, when supporting industries such as equipment manufacturing and agricultural lending are included, that figure jumps to nearly half of Iowa's economy" (12).
- "Lawmakers in states like Iowa and Nebraska have become concerned that the slow agricultural economy will severely strain state budgets" (12).
- "Rolling out broadband to rural communities will take several more years in some areas. But as access increases, so will rural America's economic potential" (13).
- "The leaders of the Congressional Agriculture Committees are working toward reauthorizing the Farm Bill. The tight budget, combined with a call for welfare reform and spending reductions (including nutrition programs) will pose a challenging environment for Farm Bill reauthorization, but the bill is expected to pass before the November mid-term elections" (15).
- "Farm solvency is an increasing concern in some regions. Wheat and dairy producers are among the hardest hit in this down cycle, as evidenced by an increase in Chapter 12 bankruptcy filings in Kansas and Wisconsin" (19).
- "Fortunately, the ag sector's balance sheet is well positioned for a multiyear adjustment process. Farm asset values, primarily farm

land, have remained firm despite persistently weak underlying crop prices. Many producers still have strong equity positions that enable them to bid aggressively for the limited land that becomes available at relatively low interest rates" (19).

- "Any further deterioration in farm prices, or a surprise acceleration in Federal Reserve tightening, would add a new level of risk to land values and farmer solvency in 2018. The continuous rise hints that more financial stress looms in the year ahead" (19).
- "While concern over financial stress in agriculture grows, comparisons to the 1980s farm crisis abound. However, the industry's balance sheet is still much stronger than during the prior correction. During that period, producers were more highly leveraged, interest rates were in double digits, and commodity prices suffered a faster and deeper correction as foreign demand for U.S. grains cratered" (20).
- "The debt-to-asset ratio is currently just over 12 percent compared to the 20 percent level that prevailed in the 1980s. However, farm debt relative to income is creeping closer to the concerning levels of the 1980s" (20).
- "Market conditions have resulted in a sharp, unsustainable divergence between farm income and farm asset values" (20).
- "The prevailing economic environment, interest rate levels, investor appetite, trade, changes in the tax code, the 2018 farm bill, and changing regulatory environment will all play a role" (20).
- "NAFTA will be the primary focus for agriculture in the first half of 2018. The deal between the three North American nations was ratified in 1994 and amended over the next several years. Since that

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## "bomb cyclone" ....

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time, Canada and Mexico have both tripled their ag exports to the U.S., and the U.S. has more than tripled its farm-related exports to both Canada and Mexico. Canada is the leading buyer of U.S. ag goods, and Mexico holds the third position after China. Combined, the two NAFTA partners buy \$43 billion worth of U.S. agricultural goods annually" (21).

- "This environment will reward farmers for scale, and therefore incentivize well positioned producers to keep growing. Younger operators on larger farms are likely to have needs and buying preferences that are significantly different from the traditional core customer of agricultural retailers" (23).
- "This consolidation of seed, crop protectant and fertilizer companies tilts market leverage toward manufacturers, when coupled with farm consolidation, it paves the way for manufacturers to more easily bypass retailers and sell directly to farmers. End-users are originating more grain directly from farmers as on-farm storage grows and more farmers improve their trucking capabilities" (23).
- "Ethanol exporters also face significant headwinds from adverse import policies in China and Brazil, and from NAFTA uncertainty that threatens market access to Canada, a top U.S. ethanol destination" (24).
- "Grain elevators will also remain largely successful handling substantial grain volume and capturing strong returns to storage, even as rising interest rates raise the cost to carry" (25).
- "While the entire supply chain will face challenges in 2018, farmers will encounter many of the greatest risks in this environment. Years of declining income and stubborn production costs have

whittled away farmers' working capital and taken a toll on farm balance sheets. In 2018, farmers who cut production costs, switch to higher-profit crops and rotations, find premiums for unique crop attributes, or find off-farm income have the greatest chance of surviving the downturn. Others will exit, as evidenced by rising farm bankruptcies. These exits will lead to fewer and larger farms, fueling the structural changes that are already underway" (25).

Finally, one last bit of information that I would like to share with you simply because it is so interesting while also giving food for thought about another issue that is so near and dear to all of us – health insurance. According to an article in Monday's (January 22, 2018) *The Wall Street Journal*, in Canada under their Single-Payer (the government) healthcare system, the average wait-time to see a specialist is 21.2 weeks. That could be a tad long depending on the nature of the patient's illness

or condition. One particular lady in Ontario learned that she would have to wait 4 ½ years to see a neurologist. Think about that.

That brings this newsletter article to a close and all of us here at North Central wish you and your families a safe and meaningful 2018. This district will work tirelessly to bring you reliable and resilient electricity. One last thought –

*"The clock of life is wound but once,  
And no man has the power  
To tell just when the hands will stop  
At late or early hour.*

*To lose one's wealth is sad indeed,  
To lose one's health is more,  
To lose one's soul is such a loss  
That no man can restore.*

*The present only is our own,  
So live, love, toil with a will,  
Place no faith in "Tomorrow,"  
For the Clock may then be still."*

— Robert H. Smith

Bailey, Paul. (2018, January 4) 'Bomb cyclone' renews concern over electricity supply reliability. Retrieved from <http://thehill.com/opinion/energy-environment/367457-bomb-cyclone-renews-concern-over-electricity-supply-reliability>

CoBank (January 2018) *The Year Ahead: The Forces that will shape the U.S. rural economy in 2018.*

Feltman, Rachel. (2018, January 3) *What the heck is a bomb cyclone?* Retrieved from <https://www.popsci.com/bomb-cyclone>

Malik, Naureen S. (2018, January 4) *Blizzard Triggers a 60-Fold Surge in Prices for U.S. Natural Gas.* Retrieved from <https://www.bloomberg.com/news/articles/2018-01-04/natural-gas-in-u-s-soars-to-world-s-priciest-as-snow-slams-east>

Pipes, Sally C. "Single-Payer Health Care Isn't Worth Waiting For". *The Wall Street Journal*. 22 January 2018: A17.



Jeff Moser takes down Christmas ornaments in Niobrara.



## North Central PPD accepting sealed bids on the following material:

7 rolls of 7' tall chain link mesh, approximately 50' each  
35-9' chain link fence posts-approximately (various diameters)  
20-7' chain link fence posts-approximately (various diameters)  
4 chain link top rails approximately 20' long

**NOTE:** Chain link material will sell as one lot.

## The following items will be sold individually to the highest sealed bid:

35' steel 3-point radio tower with 13' single pole extension  
21' steel pole (slightly bent) 9" diameter at bottom, 6" diameter at top  
30' aluminum light pole with bullhorn on top. Triangular bolt mount  
Jonsered turbo 2095 chainsaw for parts (power unit only).

1995 Artic Cat 340 Puma snowmobile. Machine is in good condition, but does not currently run.



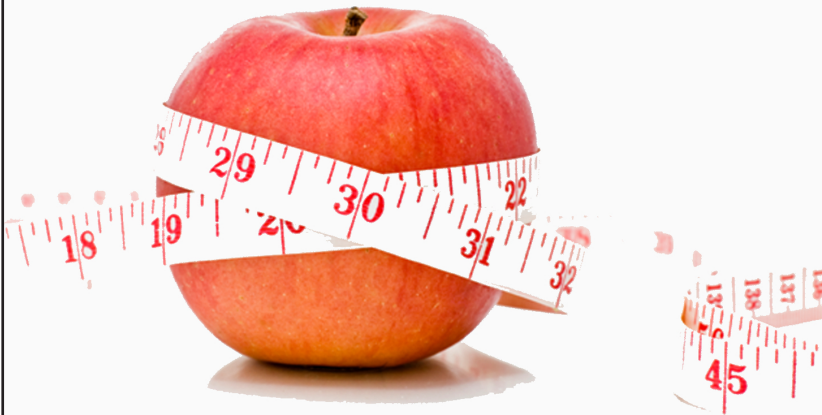
Items will be sold "as is" to the highest bidder. All sealed bids must be submitted to the NCPPD office no later than close of business on Feb. 15, 2018. For further information, or to inspect the items, contact Brent at 402-358-5112. NCPPD reserves the right to reject any and all bids.

## Important NEW YEAR Resolutions . . .

**That don't involve diet or exercise!**

1. Make sure outlets have GFCIs in the kitchen, bathroom & laundry
2. Replace frayed electrical cords
3. Check for loose-fitting plugs
4. Replace missing or broken wall plates
5. Check for overloaded outlets
6. Make sure light bulb wattage matches the fixture requirements
7. Have an electrician check outlets that are warm/discolored

Learn how to keep your family safe at:







Linda Sokol,  
Energy Advisor

## 2017 Nebraska Clean Diesel Rebate Program

The Department of Environmental Quality's 2017 Nebraska Clean Diesel Rebate Program is offering rebates to replace eligible agricultural irrigation pump diesel engines with electric motors. The application deadline for this program is 5:00 pm on February 15, 2018.

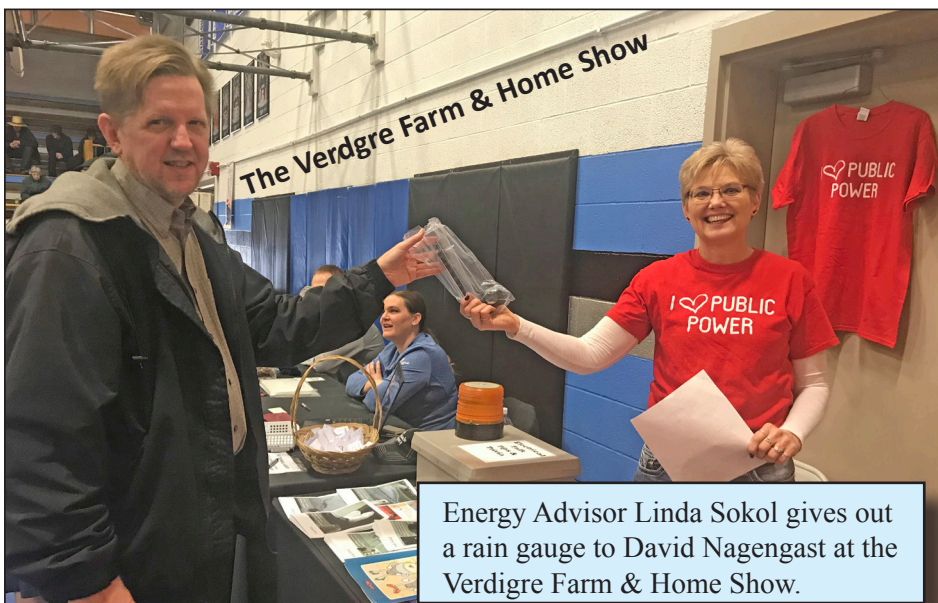
NDEQ will reimburse 60% of the cost of the new electric motor, installation, and required electrical infrastructure (including electric service line extension) up to a maximum rebate of \$16,200.

The pump engine owner is responsible for the remainder of the project costs (mandatory cost-share). Replacement incentives offered by electric service providers may be used to pay a portion of the mandatory cost-share. No other federal grant funds may be used to cover any portion of the mandatory cost-share.

In order to ensure emission reductions are achieved through this program, the diesel engine being replaced must be permanently disabled within 90 days of replacement. Replacement projects must be completed by August 30, 2018.

NDEQ anticipates awarding rebates for five irrigation pump engine replacements. Individual applicants may submit one application for a rebate for one engine. The number of irrigation pump engine rebates will be determined by NDEQ after evaluating applications for all Nebraska Clean Diesel programs.

More information and application materials can be found on the following web page: <http://deq.ne.gov/publications/pages/17-016>.



Energy Advisor Linda Sokol gives out a rain gauge to David Nagengast at the Verdgre Farm & Home Show.

*From our homes to yours . . .*

### Chicken Cordon Bleu Soup

#### Ingredients

4 cups whole milk  
1 boneless skinless chicken breast, cut into  $\frac{3}{4}$  inch pieces  
 $\frac{3}{4}$  cup plain panko crispy bread crumbs  
1  $\frac{1}{4}$  cups vegetable oil  
 $\frac{1}{3}$  cup all-purpose flour  
1 cup diced ham steak  
4 oz chive and onion cream cheese, softened

#### Directions

Place 1 Tbsp of milk and  $\frac{1}{4}$  tsp salt in large bowl. Add chicken pieces; toss to coat. Add bread crumbs; press to coat. Set aside. In 4-quart saucepan, heat  $\frac{1}{4}$  cup of the oil over medium heat. Add flour and  $\frac{1}{2}$  tsp salt and cook, stirring, 2 to 3 minutes, until thick and starting to turn golden brown, being careful to stir around side of pan. Slowly stream in remaining milk, beating constantly with whisk, until incorporated. Stir in ham with spatula; increase heat to medium-high and heat just to simmering, then reduce heat to low and simmer 5 minutes. Remove from heat; add cream cheese, and stir until melted. In 10-inch skillet, heat remaining 1 cup oil to shimmering over medium-high heat. Press bread crumbs to chicken once more, then gently place chicken pieces in hot oil. Discard any leftover bread crumbs. Cook chicken 3 to 5 minutes, turning occasionally, until browned all over. Transfer to paper towel-lined plate to drain. Divide soup among 4 bowls. Top with chicken croutons. Garnish with chopped fresh chives.



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Creighton Home Show  
Feb 24, 2018



**FOR SALE:** Pearson head gate. \$30.  
Call 402-649-1646.

**FOR SALE:** Good, 16" saddle. \$275.  
Call 641-895-8310.

**WANTED:** Paying top dollar for scrap  
metal. Call 402-841-2242.

**FOR SALE:** 50,000 BTU propane  
furnace. Used 2 years, in storage 10  
years. \$275. Call 402-582-3557.

**FOR SALE:** Wavlink AC 1200 WIFI  
Router Plainview Telephone Internet.  
Used two months. Call 402-454-5120.

**FOR SALE:** 50 gallon gas hot water  
heater, 4 yrs old. 2 LB White heaters.  
Call 402-340-9830.

**FOR SALE:** 1987 TW 25 Ford Tractor,  
under 6000 hrs, 2 wheel drive, good  
rubber, above average shape, always

been in shed. For more information  
call 402-668-7359 or 402-394-1655.

**FOR SALE:** 2000 Pontiac Bonneville SE,  
black with tan leather interior, 187,000  
miles. \$1500. Call 402-640-6204.

Do you have something to sell or  
are you looking for something in  
particular? You may call, send or  
email (bargain.barn@ncppd.net)  
your description of what's for sale or  
what you are looking for to our office.  
The ad will run in the Bargain Barn  
section free for one month. Please  
include name and telephone number.  
No commercial ads will be accepted,  
personal items only.



## Irrigation Facility Charge to be Billed in February

Customers with irrigation ac-  
counts are reminded that the  
2018 annual facility charge will be  
billed on their February statement  
received the first week in March. If  
you are considering changing your  
load control schedule (i.e. from 3  
Day Control to 2 Day Control) or if  
an account needs to be transferred  
into someone else's name, please  
notify our office as new irrigation  
contracts will need to be com-  
pleted. Changes in load control  
schedules can be made until close  
of business March 30, 2018.

### Irrigation Load Control Schedules:

No Control  
\* 2 Day Control  
\* 3 Day Control  
\* 6 Day Control

*\*Subject to Sunday Control*