

The Nodak Neighbor

July-August 2009

Official Publication of Nodak Electric Cooperative

www.nodakelectric.com

Your Touchstone Energy® Partner



Cap and trade

Proposed bill would place
a huge tax on electricity

Read how it will affect you
on pages 3 and 4

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ENERGY



EFFICIENCY

Tip of the Month

If you have ceiling fans, reverse the rotation of the blades for summer. You will feel about 4 degrees cooler than the actual temperature in the room. The fans cool you, and not the air, so shut them off when you are away from home. Also, set your thermostat at 78 degrees or higher if you are using ceiling fans. You can save 3-5 percent on air conditioning alone for each degree you raise the thermostat.

Table of contents

Perspective	page 3
What is cap and trade?	page 4
More wind energy	page 5
Outdoor electrical safety	page 6
Policy update notification	page 7
Lightning storm safety	page 8

Cover photo courtesy of Minnkota Power Cooperative.

In Recognition



Vincent Rambeck

The May/June issue of *The Nodak Neighbor* included an article on the Northern Valley Honor Flight. However, Vincent Rambeck's name was omitted. We would like to recognize Rambeck, a Nodak member from Hensel, N.D., who recently participated in the Northern Valley Honor Flight to Washington, D.C. The Northern Valley Honor Flight provides a complimentary trip for veterans of World War II in recognition of the sacrifices, which is paid through contributions from local businesses, service groups, churches, clubs and individuals.

New Employee Derek Sondreal

Derek Sondreal grew up in Thompson N.D., and graduated from high school in 2004. After high school, he attended Northwest Lineman College in Meridian, Idaho.

Sondreal has been with the Grand Forks crew on a seasonal basis since May 2008. Sondreal has now been hired as an apprentice journeyman line worker.

Derek and his wife live in rural Thompson. We welcome Derek to the Nodak family.



Derek Sondreal
Apprentice Journeyman
Line Worker



George Berg
President & CEO

Cap-and-trade bill a major concern

Known as the Waxman-Markey bill, it would place a huge tax on your electricity

A recent public survey was done to see how many people had any idea as to what the recent proposed cap-and-trade bill is about. The surveyor made it easy by asking a multiple choice question with only four choices. Less than one in four (24 percent) knew that it had something to do with an environmental issue, 29 percent guessed it was related to Wall Street, 17 percent thought it was about health care reform and 30 percent admitted they had no idea.

The point here is that the public needs to pay more attention to this bill, which recently passed the House and now goes to the Senate. It is sometimes referred to as the Waxman-Markey bill after its primary sponsors, Rep. Henry Waxman from California and Rep. Ed Markey from Massachusetts. If passed in its present form, it will result in a huge tax on coal-based electricity.

This bill is challenging in that it is extremely complex, and it is proposed to solve a very complicated concern – that of global climate change. You may want to learn more about this bill, and if you have concerns, you may want to express them to our senators.

Net margins up

On a more positive note, it appears Nodak's net margins through the first half of 2009 will be substantially higher than budget. Our margins through the end of June will be approximately \$750,000 greater than budgeted, which is about 3 percent of the gross sales through that period. We are going to say

that the extra margins come from higher-than-expected sales, as well as brilliant management. You will probably make the observation that the margins may have come from us overshooting the rate increase last January.

The truth is, it has a lot to do with above-normal sales, somewhat to do with overshooting our rate increase, and very little to do with management. In any event, if our good fortune continues, you can expect a larger-than-normal capital credit check next spring. A word of caution: a return to \$4.50 diesel fuel, a minor ice storm and reduced sales during the second half of the year can eat up excess margins in a hurry. Hope for the best during the last half of the year.

FEMA funding

North Dakota was declared a national disaster area this spring due to the extensive flooding problems. With this declaration, FEMA funding is available to cover much of the cost of restoration due to flooding, as well as mitigation measures to prevent reoccurring flood damages.

Nodak, as a not-for-profit entity, is eligible to apply for FEMA assistance. We often have poles taken out when the Red River of the North expands and ice begins to flow far outside its normal banks. We are in the process of applying for assistance to cover the cost of mitigating damage potential for future years.

Keystone Pipeline easements

We are very thankful to our members who have worked with

Minnkota Power Cooperative to provide easements allowing for transmission line extensions to serve three new pumping stations for the Keystone Pipeline. We trust that Minnkota has been fair and upfront with all of the landowners when securing these easements.

I know there was some misinformation that the cost of easement is simply passed on to the pipeline company. In reality, procurement of easements is a cost to do business for Minnkota, and is ultimately included in the rates we pay.

The bottom line is that every one of us buys electricity that comes from transmission lines going through someone else's property. While landowners need to be treated fairly, we all want the cost of our electricity to be as low as possible.

A late construction season

With the late spring, it took longer than normal for the frost to leave the ground, and it also took a long time to dry up so we could begin our construction season. Like the farmers, we are getting an extremely late start on what will be a busy construction season. We already have some of our crews working overtime, and we have hired an outside contractor to try to catch up.

For those of you who have requested new services or modifications to your existing services, we ask for your patience while we try to cram a lot of work into the next few months.

What is cap and trade?



A cap-and-trade program is an approach for managing greenhouse gases, with the goal of reducing carbon emissions in an industry, region or nation.

The goal of cap-and-trade is to reduce carbon dioxide (CO₂) by putting a legal limit (or cap) on the quantity of greenhouse gases that are emitted each year. Companies or groups are issued credits, based on the industry and size of each company or group. If a company comes in below its cap, it has extra credits it could trade with other companies.

Companies unable to meet their emissions quotas could purchase credits from other companies that have acquired more credits than they need. The cost of buying and selling these credits would be determined by the marketplace.

Electric utilities, cement and steel plants, and others under this bill would need one credit for every ton of CO₂ emitted. Under this program, some believe it will put many people out of jobs and increase a household's utility bill by hundreds of dollars each year.

Initial estimates by the Congressional Budget Office project that an economy-wide cap-and-trade program would generate at least \$50 billion per year, but could reach up to \$300 billion; however, some have estimated those numbers to be even higher.

Rep. Henry Waxman, chairman of the House En-

ergy and Commerce Committee, and Rep. Ed Markey, chairman of the House Select Committee on Energy Independence and Global Warming, co-sponsored the American Clean Energy and Security Act, also known as the Waxman-Markey Clean Energy Bill. It was passed by the House of Representatives on June 26 and next heads to the U.S. Senate.

The Waxman-Markey bill sets the cap on greenhouse gas emissions for the year 2012 equal to 3 percent below the baseline 2005 emission levels. The cap is reduced to 17 percent below 2005 emission levels by the year 2020 and more than 80 percent below the 2005 emission levels by the year 2050.

How will this affect you?

Cap and trade is a tax on carbon emissions. With any tax imposed on a business, the new expense is offset by a price increase. Thus, companies will need to increase their prices to remain stable.

No one knows exactly how much the Waxman-Markey bill would cost consumers. Douglas Elmendorf, the director of the Congressional Budget Office, testified before the Senate Committee on Finance that the cap-and-trade program costs for energy producers would be "passed along to consumers of energy and energy-intensive products," which would be in the form of higher prices.

More wind energy

Minnkota helps dedicate Ashtabula Wind Energy Center

On June 17, North Dakota Gov. John Hoeven helped partners Minnkota Power Cooperative, Otter Tail Power Company and NextEra Energy Resources dedicate the Ashtabula Wind Energy Center, which is located about 15 miles northeast of Valley City, N.D. Minnkota is Nodak Electric Cooperative's wholesale power supplier.

Local and regional officials and guests joined Hoeven and company officials at the 196.5-megawatt (MW) wind farm.

Located in Barnes County in southeastern North Dakota, the Ashtabula Wind Energy Center will generate more than 700 million kWh (kilowatt-hours) annually, equivalent to the average electricity used in more than 36,700 homes per year in the Minnkota service area. Initial operation of the 131 wind turbines at the wind farm began in December 2008.

Minnkota is purchasing energy from its 148.5 MW allocation at the wind farm through a 25-year Power Purchase Agreement with NextEra. Otter Tail owns 32 of the Ashtabula Wind Energy Center turbines, or 48 MW. NextEra owns the remainder of the turbines and operates the wind farm.

North Dakota has the most wind energy potential of any state. Led by companies such as Minnkota, Otter Tail and NextEra, it's being put into good use.

"We are pleased to be purchasing energy from NextEra and the Ashtabula Wind Energy Center," said David Loer, Minnkota president & CEO. "The energy from our 148.5 MW share of this wind energy center will bring Minnkota's wind energy to nearly 25 percent of our total annual energy requirements.

"Minnkota is a significant player in helping



develop North Dakota's abundant wind resources."

The energy produced at Ashtabula will help Minnkota meet renewable energy mandates and objectives in Minnesota and North Dakota, respectively. The Minnesota Renewable Energy Standard requires a 25 percent renewable power supply component by 2025, and the North Dakota Renewable Energy Objective sets a renewable goal of 10 percent by 2015.

Minnkota is a generation and transmission cooperative that supplies wholesale electricity to 11 electric distribution cooperatives serving a 34,500-square-mile area in eastern North Dakota and northwestern Minnesota. Minnkota is also operating agent for the Northern Municipal Power Agency (NMPA), which serves 12 municipal utilities in the same geographic region.

Together, the Minnkota/NMPA Joint System serves more than 130,000 customers.

Working outside this summer?



Think safety first!

Trimming tree limbs by power lines

Use caution! Remember, electricity doesn't need metal to transfer. The moisture in the tree and in you will do nicely. If you move a limb enough to come into contact with the line, electricity now has a direct path to ground through the tree, your pruning tool and you! Call Nodak Electric or your local department of transportation for assistance if the limbs are over a roadway.

Digging a couple of inches into the ground, do I need to worry about the lines?

How long ago were those lines laid? How has the ground shifted in that time? Is it possible you might accidentally push your shovel deeper than you intended? Error on the side of caution – make the call.

Planting near a padmount transformer

Many homeowners have padmount transformers located on their property. It is possible to attractively landscape around the transformer with ornamental shrubs, but it is important to remember not to plant shrubs on the padlock side of padmount transformers. This side must be kept open for maintenance work to be done on the padmount. Keep in mind that a padmount transformer indicates buried lines in the area, so be sure to call before you dig.

Take care when planting trees

Before selecting trees for your landscaping project, look up, look way up. Will the trees you plant today become tangled in a power line in the future? A tree that comes

into contact with a power line can be energized, creating a hazard for people at ground level. To prevent these hazards, property owners are encouraged to plant trees that will not cause a problem down the road. For your project, consider low-growing shrubs that attract attention to your yard and away from overhead lines. Once you select the appropriate trees, call before planting to ensure there are no underground lines in the area.

Using electrical equipment outdoors

First, make sure the equipment is intended for outdoor use. Unless the equipment is intended to be weather resistant, summer weather such as rain can ruin the product and cause a serious shock hazard.

Use a residual current device (RCD) for all outdoor electrical equipment, and make sure the RCD is working by pressing the 'test' button at least once every three months. Inspect products for damaged cords, plugs or wiring. If cables and plugs are damaged, take the time to replace them before using the equipment. Store electrical equipment in a dry place and safely out of the reach of children.

Safety after dark

While thinking about safety for your home and family, consider adding an area light to your property. Outdoor area lighting can help discourage nighttime crime and prevent accidents. Area lighting is a good idea, especially if you live on a dark street, own a larger lot or rural property, or if your yard is next to an alley or parking lot.

ALWAYS CALL BEFORE YOU DIG

One free, easy call gets your utility lines marked AND helps protect you from injury and expense. Safe digging is no accident: always call 811 before you dig. Visit call811.com for more information.



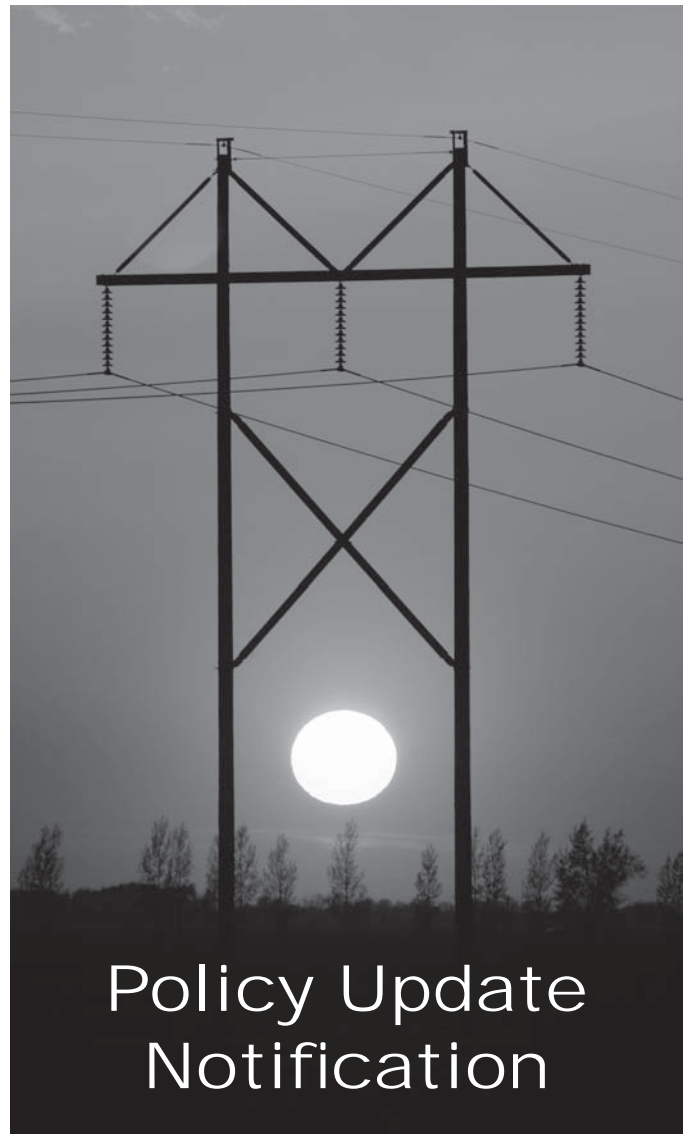
Power quality criteria

FOR LARGE LOADS

The Nodak Electric Cooperative Board of Directors recently updated its power quality policy #414, which provides guidelines for allowable voltage flicker and sag on the distribution system during motor starting as well as voltage disturbances due to other load issues. Below is a summary of the changes.

A voltage 'flicker' can occur when motors are starting under high loads. This can cause a voltage drop, which is evidenced by the flickering of lights. The flicker is objectionable only when the magnitude and frequency of occurrence of the voltage drop exceed certain thresholds. A voltage flicker curve was added to the policy following IEEE Standard 141-1993 that defines the visibility threshold of a flicker and when it becomes an irritation comparing percentage voltage dip versus the frequency and times between dips.

Voltage 'sag' is a short-term decrease in voltage beyond just a flicker that lasts anywhere from milliseconds up to a few seconds. The most common cause of voltage sags is the starting in-rush current drawn when a motor starts. Nodak uses the Information Technology Industry Voltage Tolerance Envelope, known as the ITI CBEMA curve, as a guideline to evaluate effect of voltage sags. In short, the curve states that equipment should tolerate voltage sags to 80 percent of the nominal service voltage for up to 10 seconds and to 90 percent continuously according to the voltage tolerance limits. Most motors should be up to speed within the 10-second timeframe. If starting times exceed 10 seconds, voltage sags need to be limited to 90 percent of the nominal service voltage.



Policy Update Notification

Motor sizes of concern are 15 horsepower and greater served by a single-phase source, and 45 horsepower and greater served by a three-phase source. These motors must follow the guidelines stated above.

Before adding a large motor load to your electrical service, please contact Nodak Electric's engineering department to evaluate your service size requirements. Also, be sure to review the starting characteristics of your motors with an electrician to make sure they comply with this policy. If a power quality issue is caused by the action of a customer, it is the customer's responsibility to take corrective action.

A copy of this policy may be obtained by calling the office. Please check the Nodak Electric Web site for a future link to pertinent policies such as this one for your convenience. Our Web site is www.nodakelectric.com.

Your assistance in helping Nodak accomplish our mission of providing quality service is greatly appreciated!

Know what to do when lightning strikes

Lightning causes more storm-related deaths annually in the United States than tornadoes or hurricanes, and causes about \$5 billion in economic losses each year.

During the summer months, when people spend more time working and playing outside, Safe Electricity offers safety tips and precautions recommended by the National Weather Service to avoid injury and damage during thunderstorms and lightning activity.

Plan outdoor activities around the weather, and have a lightning safety plan that follows the '30-30 Rule'. Under the 30-30 Rule, if you are outside when a storm approaches and you see lightning, count the time until you hear thunder. If you count 30 seconds or less, seek proper shelter. Wait at least 30 minutes after the last observed lightning or thunder before leaving shelter.

The safest location is indoors away from doors and windows. Avoid water, electric appliances and other objects that could conduct electricity, and use only cordless or cell phones to make emergency calls.

Phone use is the leading cause of indoor lightning injuries in the U.S. A direct strike is not necessary for lightning voltage to enter your home through phone

lines, electrical wires, cables and plumbing. Other recommendations to avoid lightning shock and damage indoors include:

- Turn off and unplug appliances well before a storm nears – never during.
- Stay away from electrical outlets, appliances, computers, power tools and TV sets. Take off headsets and stop playing video games.
- Avoid water and contact with piping, including sinks, baths and faucets. Don't wash dishes, shower or bathe during a thunderstorm. Also avoid washers and dryers since they not only connect with the plumbing and electrical systems, but also contain an electrical path to the outside through the dryer vent.
- Do not lie on the concrete floor of a garage as it likely contains a wire mesh.
- Basements typically are a safe place to go during thunderstorms, but avoid concrete walls that may contain metal rebar.

If you can't get to a house before a thunderstorm hits, move to a safer location such as a vehicle with a solid, metal roof. Close the windows and avoid contact with electrical conducting paths, such as the steering wheel, ignition or radio.

If caught outdoors and unable to get to a proper lightning shelter, avoid water,

high ground and open spaces. Do not seek shelter under tall, solitary trees; canopies; small picnic or rain shelters; or in any open-frame vehicles such as jeeps, convertibles, golf carts, tractors or mowers. Do not stand near power, light or flag poles, machinery, fences, gates, metal bleachers, or even other people. Spread out at least 20 feet apart from each other. Move to low ground and seek cover in clumps of bushes or trees of uniform height, such as a forest.

"If you're in an open area outside, tingling skin or crackling sounds could signal that lightning is about to strike," warns Hall. "Drop down into a crouching position and make yourself as small as possible – feet together and hands over your ears – with minimal contact with the ground."

After the storm, remember safety tips to avoid electrical hazards.

"Remember fallen limbs and debris could be hiding hazards such as downed electrical wires," cautions Hall. "If you see dangling or fallen lines, assume they are electrical wires, and are energized. Warn others to stay away, and when it is safe to use a phone, call your local electric provider."

Additional lightning facts and safety tips can be found at the National Oceanic and Atmospheric Administration Web site at www.lightningsafety.noaa.gov.

