

The Nodak Neighbor

November/December 2012

Official Publication of Nodak Electric Cooperative
www.nodakelectric.com

Your Touchstone Energy® Partner



Official Publication of the
Nodak Electric Cooperative, Inc.

746-4461 or 800-732-4373

www.nodakelectric.com

The Nodak Neighbor (USPS 391-200) is published six times a year, February, April, June, August, October and December for \$1.00 per year by the Nodak Electric Cooperative, Inc., 4000 32nd Ave. S., Grand Forks, N.D. 58201-5944. Periodicals postage paid at Grand Forks, N.D., and additional mailing offices. POSTMASTER: Send address changes to NODAK ELECTRIC COOPERATIVE, INC., P.O. Box 13000, Grand Forks, N.D. 58208-3000.

Volume 62, No. 6
November-December 2012
Officers and Directors

Chairman of the Board Steven Smaaladen
Vice Chairman Donna Grotte
Secretary/Treasurer David Hagert
Directors Roger Diehl, Bruce Fagerholt,
David Kent, Doug Lund,
Lee McLaughlin and Paul Sigurdson
President & CEO Mylo Einarson
Editor Blaine Rekken

Table of contents

2013 director elections page 2
Perspective page 3
Leading lignite innovation page 4
Winter load management page 6
Employee news page 7
Commentary page 8

Snowbirds

If you are planning to leave your home for an extended period of time this winter, remember to call Nodak Electric to make billing arrangements while you are away. Nodak offers automatic checking or credit/debit card payments and online payment options are available as well.

2013 director elections



Bruce Fagerholt, District 1



David Kent, District 2



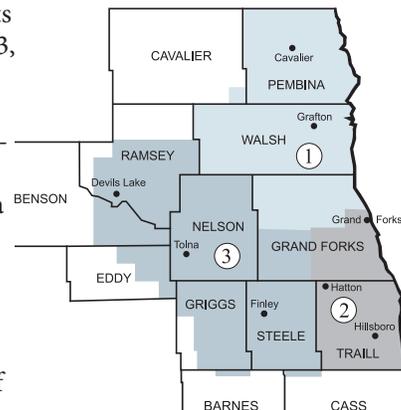
Donna Grotte, District 3

Nodak Electric Cooperative, Inc., will hold its 73rd annual meeting Thursday, April 11, 2013, at the Alerus Center in Grand Forks, N.D. Election for three director positions will be held at the annual meeting. Incumbent directors up for reelection are Bruce Fagerholt, District 1; David Kent, District 2; and Donna Grotte, District 3.

People who desire to serve as a member of the Nodak Board of Directors may be nominated in one of two ways:

1. By a petition signed by 15 members of Nodak in good standing. The petition must be in Nodak's office 45 days prior to the annual meeting.
2. A member can be nominated by the Nominating Committee. The committee will meet in February 2013.

If you are interested and would like further information, please feel free to contact Nodak's office at 1-800-732-4373.



*New day and time for
Annual Meeting!*

Thursday, April 11, 2013

Alerus Center, Grand Forks, N.D.

**Registration and meal at 5 p.m.
Meeting at 6:30 p.m.**

Mark your calendars!



Mylo Einarson
President & CEO

Federal funding critical for disaster recovery

As I sat down to begin writing this column, millions of people along the eastern seaboard were without power as a result of Hurricane Sandy. Pictures and reports of the widespread devastation were just beginning to filter their way through the national media, and the size of the recovery effort has now become apparent.

A natural first reaction when seeing this kind of devastation is one of disbelief. It's hard to comprehend the enormity of the job that lay ahead for those involved in the cleanup. It will be days before line crews get power restored, weeks before transportation is running adequately again, months until the debris is all removed, and probably years before life returns to normal in that part of the country.

One thing is certain when it comes to these types of disasters – the cost of rebuilding critical infrastructure is almost always too great for the local entities to withstand without the involvement of the Federal Emergency Management Agency (FEMA). FEMA assists in returning destroyed areas to pre-disaster condition. Without this federal assistance, 100 percent of the cost of the recovery would be funded by local taxpayers, businesses and utility ratepayers.

FEMA has been involved in assisting local not-for-profits like Nodak for decades. When we have had major storm damage, FEMA has assisted in the cost of reconstruction, thereby lessening the burden on our members.

Like a lot of federal programs, improvements need to be made in the delivery of FEMA's mission during and after presidentially declared disasters. In fact, I would argue that in many respects, FEMA needs to be retooled and overhauled. However, FEMA's public assistance program delivers much-needed assistance to electric cooperative consumers restoring electric services and it needs continued funding and support from our federal government. Without it, those of us living in disaster-prone areas would face additional burdens of longer waits for service restoration and most certainly higher rates.

As the election passes and a

new Congress takes over, encourage your elected leaders to pass a federal budget that continues strong support for this important mission. Without it, recovery from these natural disasters would be almost impossible.

Our hats are off to the many volunteers giving their time to rebuild the devastated areas of our country. A special thank you and congratulations to the many men and women who braved the storm, floods, fires, etc., to protect our fellow citizens and help restore their lives to normal. Much of this work is done in horrible conditions and without any fanfare, but their efforts are greatly appreciated.

Be prepared for winter storms

Winter storms can range from a moderate snow over a few hours to a blizzard with blinding, wind-driven snow that lasts for several days. Some winter storms are large enough to affect several states, while others affect only a single community. Many winter storms are accompanied by dangerously low temperatures and sometimes by strong winds, icing, sleet and freezing rain.



Regardless of the severity of a winter storm, you should be prepared in order to remain safe during these events.

Know the Difference

- **Winter Storm Outlook** – Winter storm conditions are possible in the next two to five days.
- **Winter Weather Advisory** – Winter weather conditions are expected to cause significant inconveniences and may be hazardous. When caution is used, these situations should not be life threatening.
- **Winter Storm Watch** – Winter storm conditions are possible within the next 36 to 48 hours. People in a watch area should review their winter storm plans and stay informed about weather conditions.
- **Winter Storm Warning** – Life-threatening, severe winter conditions have begun or will begin within 24 hours. People in a warning area should take precautions immediately.

Clean Coal Solutions' facility is set up near the plant's coal conveyor belt where it drops the CyClean combustion additives directly onto the coal. The result is lower emission levels and improved boiler operability.

Leading lignite innovation

Minnkota using new clean coal technology at Young Station



Minnkota President & CEO Mac McLennan (second from left) explains how clean coal technology works at the Young Station to U.S. Sen. John Hoeven and N.D. Gov. Jack Dalrymple. Charlie McNeil, NexGen Resources CEO, and Mike Durham, ADA-ES president, listen in.

Cuts in emission levels. Big gains in power plant efficiency. The newest ingredient at the Milton R. Young Station is turning North Dakota lignite coal into a cleaner, more dynamic fuel source.

Minnkota Power Cooperative, our wholesale power provider, is seeing results through the use of CyClean, a combustion additive technology that reduces mercury and nitrogen oxides (NO_x) emissions and improves operations in the plant's cyclone boilers.

Minnkota's Young Station, located near Center, N.D., is the first lignite-based, cyclone boiler power plant in the country to use CyClean technology.

"We are pleased that we have found a cost-effective technology that can help us meet current and future regulatory requirements and further reduce our power plant emissions," said Mac McLennan, Minnkota president & CEO. "This technology also provides us with another operational tool to deal with the variables of lignite coal and boiler conditions. We are continuing to use and evaluate the longer-term use of CyClean additives."

Following a successful testing period, the Young Station began using CyClean technol-

ogy in its boilers in 2011. Minnkota is working on the project with Clean Coal Solutions (CCS), a Colorado-based power plant technology and research firm.

The greatest feature of CyClean is its ability to reduce the Young Station's emission levels and provide cost-effective options to meeting future regulatory requirements. The technology has proven the ability to reduce mercury emissions by 40 percent and NO_x by an additional 20 percent from previous levels.

How does it work?

The CyClean system requires no large machinery or major modifications to the plant. A small building was constructed near the coal supply belt as it enters either of the plant's two generating units. CyClean is applied – in both a granular and liquid form – directly onto the coal as it enters the facility on a conveyor belt.

Low initial installation costs and potential operational advantages made CyClean an appealing technology in comparison to other types of emission control equipment. Early results show that CyClean has the added benefit of reducing several of the plant's operating costs.

“North Dakota is a powerhouse for the country. And we’re not just driving energy development in this country, we’re driving the technology development.”

– SEN. JOHN HOEVEN



The technology was developed by ADA-Environmental Solutions, a major owner in the CCS joint energy venture. ADA-ES President Mike Durham commended Minnkota for taking the initiative to become an early adopter of the innovative technology.

“The important lessons learned in the first use on lignite will be valuable in making this technology and its benefits available to other lignite plants in North Dakota and coal-burning plants across the country,” Durham said.

Jerry Daseler, who heads facility operations and management for CCS, said his group and Minnkota are pioneers in the production of refined coal using the CyClean technology on lignite coal.

“We are proud and excited in the results demonstrated thus far and look forward to producing cleaner energy for years to come at the Young Station while taking advantage of North Dakota’s low-cost and abundant coal reserves,” Daseler said.

Taking notice

Minnkota and CCS joined North Dakota Gov. Jack Dalrymple and U.S. Sen. John Hoeven, N.D., at the Young Station on Oct. 15 to unveil the project. Dalrymple said he was impressed during his first trip to the plant and emphasized the importance of the lignite industry in the state.

“Minnkota’s clean coal project supports our commitment to further reduce emissions even though North Dakota is already among the states with the nation’s cleanest air,” Dalrymple said.

Sen. Hoeven cited the project as another excellent example of the state’s utilities being proactive in testing and implementing new technology.

“North Dakota is a powerhouse for the country. And we’re not just driving energy development in this country, we’re driving the technology development,” Hoeven said. “Efforts like this clearly underscore the fact that a true all-of-the-above strategy for American energy independence must include lignite coal



if we want to make our nation truly secure and economically vibrant.”

The successful implementation of CyClean at the Young Station could pave the way for other coal plants in the state and across the country to adopt the technology.

“We have to find solutions like this to be able to continue to use this great resource effectively, cleanly and more efficiently,” McLennan said.

Plant Manager Gerry Pfau describes how CyClean reduces mercury and NO_x emissions to North Dakota Gov. Jack Dalrymple.

Generator safety

Generators can be dangerous or deadly to the user and to Nodak personnel working to restore your electric service. Here are some very important safety precautions to consider when using a generator.



- ✓ Never use a portable generator in an enclosed area. Generators produce a dangerously high amount of carbon monoxide very quickly. Carbon monoxide is odorless and cannot be seen, and can cause serious brain damage and even death. Even if you cannot smell exhaust from the generator, you can still be exposed to carbon monoxide. If you start to feel dizzy or weak, get to fresh air immediately!
- ✓ Never try to power a house by plugging the generator into a wall outlet. This is known as backfeeding and is EXTREMELY dangerous to yourself, your neighbors and cooperative personnel working to restore your power.
- ✓ Always keep the generator dry; do not operate in wet conditions.
- ✓ If you are connecting a generator to your home’s wiring system, a double-throw disconnect switch MUST be installed and working properly. Contact Nodak Electric for more information.



Winter load management hours estimated near averages

An unseasonably warm winter last year reduced electricity demand and helped contribute to the lowest number of winter load management hours in a decade.

This year's forecast suggests that normal weather conditions, low wholesale market prices and no major power plant maintenance will bring control hours closer to recent averages. Minnkota Power Cooperative, our wholesale power provider, estimates 245 hours of load control this year for consumers in the off-peak electric heating program.

The off-peak program is for those who use electricity to heat their homes, while still having a nonelectric backup heating source. Members continue to heat their homes with their electric heating system, but during periods of peak electric usage, their electric heating is shut off and their backup system is used. Participants in the voluntary program receive a lower power rate for electricity consumed by their

heating systems.

"Electric members who have a well-maintained backup heating system should not notice a difference in comfort level when their off-peak heating system is controlled," said Todd Sailer, Minnkota energy supply manager.

Sailer said the combination of off-peak electric heat and a non-electric backup is still less expensive than heating with straight fuel oil or propane in most instances.

"The ability to manage costs and plan for the heating season is one of the many benefits of the off-peak electric heating program," Sailer said.

During peak electric demand periods, Minnkota and the associated systems essentially have two options: purchase surplus energy from the wholesale market or initiate load control from its headquarters in Grand Forks.

"Minnkota's first option is always to purchase energy from the market

and avoid controlling our off-peak loads," Sailer said. "But there are times when affordable power isn't available. By utilizing load management in those cases, Minnkota avoids making costly energy purchases that would force an increase in our regular rates."

Minnkota participates in the market, which extends throughout the Upper Midwest, to both buy and sell surplus energy with other utilities. When energy cannot be obtained economically, Minnkota and the associated systems choose to control off-peak electric systems.

Even though the demand for power is expected to increase from last winter, Minnkota has no major power plant outages scheduled and anticipates it will often be able to purchase economical energy to cover peak loads. However, unexpected outages, transmission line constraints and extreme cold weather periods can cause load control hours to increase.

"The cost to deliver power to the associated systems can change at a moment's notice," Sailer said. "The load management program protects consumers from the volatility of the market and prevents the need to build new power plants just to serve peak loads."

Millions of dollars have been saved due to the successful operation of Minnkota's load management system over the past 35 years.

Electric Off-Peak Rate	Propane 60% Efficient	Propane 90% Efficient	Fuel Oil 60% Efficient	Fuel Oil 80% Efficient
Long-Term Control \$0.056/kWh*	\$0.90/Gal.	\$1.35/Gal.	\$1.39/Gal.	\$1.84/Gal.
Short-Term Control \$0.071/kWh*	\$1.14/Gal.	\$1.71/Gal.	\$1.75/Gal.	\$2.33/Gal.

If the price you pay per gallon of propane or fuel is greater than the value listed, then the off-peak rate is the least expensive choice.

*Prices include the \$0.003/kWh renewable energy adjustment adder.



Damus Chaput

Chaput retires

Damus Chaput, Cavalier district crew foreman, has retired from Nodak after 38 years of service. He began his career with the Grand Forks crew and transferred to the Cavalier crew in 1977, where he has been foreman the last several years. Following retirement, Damus plans to visit family in North Dakota, Minnesota, Nebraska and New York. He enjoyed working with Nodak employees and the many great members he met over the years.



Brian Charbonneau

Promotions

Brian Charbonneau has accepted the position of Cavalier district crew foreman following Chaput's retirement. He joined Nodak in 1990 with the Grafton crew. Brian lives with his family in Cavalier.



Derek Sondreal

Derek Sondreal was promoted to journeyman lineman with the Grand Forks crew. He started as a seasonal apprentice lineman in May 2008 and became a permanent employee in June 2009. He attended Northwest Lineman College in Idaho. He lives with his family in rural Thompson.

New faces at Nodak



Joe Winkels

Joe Winkels has joined Nodak as an Accountant II in the Grand Forks office. A Grand Forks native, he graduated from Central High School and earned his BBA in management from the University of North Dakota. He was previously employed with Laserlith Corporation, a government research and development contract company specializing in UAV development in Grand Forks. Joe, his wife, Jennifer, and son, Christian, live in Grand Forks.



Bjorn Olson

Bjorn Olson began his employment at Nodak in December 2011 as a seasonal apprentice lineman with the Grand Forks construction crew. He was hired as a permanent employee in September 2012. Originally from Cambridge, Minn., he attended the Northwest Lineman College in Idaho. Bjorn resides in Grand Forks.



Jared Stadstad

Jared Stadstad started at Nodak in June 2011 as a seasonal apprentice lineman with the construction crew. He was hired as a permanent employee in November 2011 and transferred to the Cavalier crew in September 2012. A Bismarck State College graduate, Jared resides in Cavalier.

Remembering Tim



Tim Kiemele

Nodak was saddened by the loss of Tim Kiemele, Devils Lake crew foreman, who unexpectedly passed away Sept. 15, 2012. Tim had been with Nodak for 34 years and was crew foreman for the last several years. His death is a huge loss for those of us who worked with him, as he was always willing to lend a helping hand and listening ear. We will truly miss his wonderful sense of humor.

Tim had a passion for cars, whether fixing them or cruising the streets. He was also a skydiving fanatic and an outdoorsman. He enjoyed hunting, lots of fishing and playing his guitar for family and friends.

Tim is survived by his grown children, Stefanie, Jodi and Cory, whom he would brag about whenever given the chance. He will be truly missed by family, friends and anyone who ever met him, even once.

*Nodak's offices
will be closed for the
following holidays:*



*Thanksgiving
Thursday & Friday, Nov. 22 & 23*

*Christmas
Monday & Tuesday, Dec. 24 & 25*

*New Year's Day
Tuesday, Jan. 1*



GUEST EDITORIAL

Proposed carbon rule could have big impact

By Mac McLennan, *President & CEO*
Minnkota Power Cooperative

It doesn't take a strong base of the three Rs (reading, writing and arithmetic) to figure out the two Rs consuming most of my time the past year have involved Rates and Regulations.

One R goes hand in hand with the other. At Minnkota, we push for the most sensible regulations that meet the objective while protecting affordable rates for consumers. It can be challenging, though; as an energy company, we have a proliferation of compliance requirements from a growing number of regulatory bodies.

Yet another EPA proposed rule could affect our rates. The proposed New Source Performance Standard (NSPS) for carbon dioxide (CO₂) would require any new power plant to emit no more than 1,000 pounds of CO₂ per megawatt-hour (MWh), which is roughly the output from a new natural gas combined cycle plant.

On the other hand, the average coal-fired power plant emits 2,000 pounds of CO₂ per MWh. Essentially, the EPA has chosen a standard that works for natural gas but not coal. In effect, the rule eliminates the use of new coal plants as a generation source. Coal plants seeking to meet the emissions limits would need carbon capture and storage technology (CCS) that still may be years away from commercial viability.

This proposed carbon rule purports to apply to only new units. However, I am concerned that if the process under the section of the Clean Air Act that the EPA is pursuing with these new units continues, we certainly will be impacted in the future. Should we have CCS in place

commercially before we talk about limits? Yes.

After all, who would take the risk of investing billions

Environmental issues are tricky ones to manage. We all want clean air and water and we want generations in the future to enjoy them as well, but we have to be able to pay for them.

into a power plant in hopes that CCS will be developed? I don't proclaim to know the answer to the whole debate regarding greenhouse gases and the environment, but what I do know is that the current path we are on with the EPA has the potential to significantly impact

Minnkota and our members.

This carbon reduction standard sidetracks the plans of cooperatives for future baseload generation.

Environmental issues are tricky ones to manage. We all want clean air and water and we want generations in the future to enjoy them as well, but we have to be able to pay for them.