



CHERVESTAD SERVES NINE YEARS AS DIRECTOR

Aaron Chervestad of Oklee was recognized at Red Lake Electric Cooperative's annual meeting for having served nine years as board director. The nine years spanned from March of 2015 to March of 2024. Chervestad represented District 7 of the cooperative's service territory which includes the townships of Goodridge, Reiner, Kratka, Highlanding, Star, Wyandotte, Mayfield and Deerpark. He was presented with a plaque in appreciation of his years of service by the cooperative.

RED LAKE ELECTRIC CO-OP DIRECTORS ACHIEVE CREDENTIAL IN TODAY'S ELECTRIC UTILITY COMPETENCIES

Colette Kujava of Newfolden, District 3, and Cecil Anderson of Thief River Falls, District 8, from Red Lake Electric Cooperative recently received the Credentialed Cooperative Director certificate from the National Rural Electric Cooperative Association (NRECA).

An ever-changing business environment has imposed new demands on electric cooperative directors, requiring knowledge of changes in the electric utility business, new governance skills and a solid knowledge of the cooperative principals and business model. Electric co-ops in Minnesota and Red Lake Electric have a commitment to work through NRECA to sharpen this body of knowledge for the benefit of their electric cooperative consumer-owners.



The NRECA Credentialed Cooperative Director (CCD) program required attendance and demonstrated understanding of the basic competencies contained in five core courses:

- Director Duties and Liabilities
- Understanding the Electric Business
- Board Operating and Process
- Strategic Planning
- Financial Decision Making



BLAWAT SERVES 13 YEARS AS DIRECTOR

Stacy Blawat of Thief River Falls was recognized at Red Lake Electric Cooperative's annual meeting for having served 13 years as board director. The 13 years spanned from March of 2011 to March of 2024. Blawat represented District 2 of the cooperative's service territory which includes the townships of Excel, Agder, Grand Plain, Moylan, Espelie, Valley, Eckvold, Mud Lake, East Valley, Holt, Spruce Valley, Ceder, Whiteford, Como and Huntly. She was presented with a plaque in appreciation of her years of service by the cooperative.

RELIABILITY:

IT'S OUR PRIORITY!

Red Lake Electric Cooperative was founded with the mission of delivering reliable rural power – not to gain profits. For that reason, we will never cut corners when it comes to ensuring your power is on when you need it. We invest in the **resource diversity, technology and people** necessary to get the job done, and get it done well. The following is a small snapshot of what we do to keep your electricity reliable.



RESOURCE DIVERSITY

Your co-op distributes electricity generated by its power supplier, Minnkota Power Cooperative. Minnkota's generation capacity portfolio contains 57% coal power, 34% wind power, 7% hydropower and 2% from the greater energy market. We're proud to deliver power that is 41% carbon-free. Likewise, we take great pride in offering the 24/7 baseload electricity provided by coal, which isn't affected by cloudy or wind-free days. This resource diversity ensures a reliable electricity flow (31679 Blake A Abeldgaard) while also reducing emissions. It's a win-win!



MODERN TECHNOLOGY

We focus on integrating the latest smart technology into our electric grid to reduce outages, and to allow us to respond quickly in the case of one. We are proactive in our infrastructure investments to ensure you are getting the most efficient and effective service available. On a larger scale, our cooperative system leverages a demand response strategy (also known as the off-peak program) to keep our grid balanced and reliable during times of high demand. Every small element of technology works toward our greater goal of reliable power.



DEDICATED PEOPLE

More than anything, it's our people who keep your co-op's service reliable. We may be biased, but we work among some of the most skilled and dedicated employees in the region, people who live right here in our service territory. They are invested in delivering reliable power, because it's their power, too. This is true from our board of directors to our line-workers in the field – we are on call to make sure your power is (20650 Brad D Lunke) there for you, every moment of every day.



Red Lake Electric Cooperative selects **BRIANNE ELLISON** of Thief River Falls as the 2024 Youth Tour Representative



Red Lake Electric Cooperative is excited to announce Brianne Ellison of Thief River Falls as its Youth Tour representative for 2024. A junior at Lincoln High School, Brianne is the daughter of Chris and Nicolle Ellison. She will join hundreds of high school students representing their cooperatives on an all-expense-paid trip to Washington, D.C., June 18-23.

Kelli Brateng, Member Services Manager for Red Lake Electric Cooperative, expressed excitement about Brianne's opportunity to engage with the legislative process firsthand. The Youth Tour not only offers educational benefits but also provides a platform for students to build lasting friendships and develop leadership skills.

Participants will undergo leadership training, learn more about electric cooperatives, interact with U.S. Representatives and Senators, and explore Washington, D.C.'s memorials and museums.

For over 57 years, the Electric Cooperative Youth Tour has empowered high school students to explore the nation's capital and gain valuable insights into the cooperative movement. Selection for this esteemed program is conducted by local electric cooperatives, serving as a shining example of the cooperative principles of commitment to community and youth education.

Congratulations and best wishes for an enriching experience!

FOR JUST THE CHANGE
IN YOUR POCKET, YOU
CAN CHARGE YOUR
CELLPHONE 200 TIMES
WITH JUST ONE
KILOWATT HOUR.



PAYING PENNIES FOR YOUR
KILOWATTS – THAT'S THE
VALUE OF ELECTRICITY

VALUE OF
ELECTRICITY

FROM SUN TO SHADE – SOLAR GENERATION PROS AND CONS

Imagine the warmest day of the year. You are enjoying a perfect glass of ice-cold lemonade and listening to the hottest songs of the summer. Now imagine the wind is howling, snow is falling hard to the ground, and you can't even venture outside (32073 Amanda L Okins) without three layers of warm clothes.

On days when the sun feels like it is never going to set, solar makes sense. On other days (and during the night), solar generation can face real issues in our region. On an annual basis, solar farms in Red Lake Electric Cooperative's area are only able to reach a 15-18% capacity factor – meaning they only produce a small amount of energy compared to their maximum output potential.

Electric utilities must be mindful of how solar is integrated into the larger grid while still maintaining high levels of reliability. Like all electricity generation resources, there are both pros and cons to solar that must be considered.

STRENGTHS

Renewable energy source

Solar power is a renewable form of energy generation. Solar panels soak up the sun's rays and produce electricity with zero emissions.

Scalability

You can build solar farms as large or as small as you need to meet the generation demands of an area. When utilities build solar farms, they can customize the total generation capacity available with the number of solar panels used.

CHALLENGES

Weather dependent

Solar generation is completely dependent on the sun's availability at any moment of the day. Cloud cover and harsh weather conditions can affect the generation produced. How much power can be produced depends on the region of the country, the time of year and even the time of day.

Large land requirements

Large-scale solar farms require a significant amount of land to operate on. Densely populated areas that often require more energy generation might not be able to support the amount of space needed to effectively operate. Building on the land (25605 Daniel A Larson) may also impact local ecosystems, habitats and even agriculture in a community.

Reliability concerns

Making sure there is enough generation available for the membership is crucial when operating on the grid. Intermittent resources, like solar, cannot alone meet the 24/7 demand for electricity across our region and often face challenges in the darker winter months when consumers use the most energy in our region. Additional transmission infrastructure is likely also needed to ensure the electricity can be delivered from the solar array to where it is needed.

WIND ENERGY: PROS AND CONS

As we've said before in the pages of this newsletter, Red Lake Electric Cooperative believes in an all-of-the-above energy strategy to keep your electricity reliable, affordable and sustainable. Our power supplier, Minnkota Power Cooperative, uses a diverse mix of resources to generate energy – coal, hydro and wind. All of these resources have benefits and downfalls. But when they work together, we can overcome their respective challenges.

Today we're examining the pros and cons of wind power, which makes up 34% of Minnkota's generation capacity.

WIND ENERGY PROS

- **Carbon-Free and Renewable:** Wind energy is a clean and renewable source of power. It doesn't produce emissions during operation.
- **Abundant Resource:** Wind is an abundant resource, available in many regions across the globe – notably in the prairies of North Dakota. Harnessing wind energy (31803 Robert F Wallace) can balance dependence on other fuel sources.
- **Low Operating Costs:** Once wind turbines are installed, the operational costs are relatively low. There are no fuel costs, and maintenance expenses are generally manageable.

WIND ENERGY CONS

- **Intermittency and Variability:** The wind is not always strong enough to turn turbines, which are dependent on wind speed and direction. This can lead to fluctuations in electricity generation, requiring backup power sources to ensure grid stability 24/7. Wind energy's capacity factor (the amount of time it can produce power versus its maximum output) is 40%-50% annually.
- **Visual and Noise Impact:** In some cases, people find wind turbines visually unappealing, particularly in wide open rural areas. Additionally, the noise generated by wind turbines can sometimes bother those who are exposed to it daily.
- **Wildlife Impact:** Wind turbines can pose risks to birds and bats, particularly if located in migration routes or nesting areas. Collisions with turbine blades or changes in habitat due to construction can harm wildlife populations.

If you're interested in incorporating more wind energy into your home's power, visit our website or contact our office to learn more about the Infinity Renewable Energy program!



Submit your recipes to be published in *Volts & Jolts*. Email to info@redlakeelectric.com or mail to: Red Lake Electric Cooperative, PO Box 430, Red Lake Falls, MN 56750-0430.

Southwestern Pasta Salad

INGREDIENTS

- 8 oz rotini pasta
- 1 red bell pepper, seeds and stem removed, diced
- 1 green/yellow/orange bell pepper, seeds and stem removed, diced
- 1 1/2 cups diced cherry tomatoes
- 1 cup frozen or canned corn, thawed if using frozen
- 15 ounce can black beans, drained and rinsed
- 1/2 cup chopped cilantro
- 4 green onions, chopped

Dressing:

- 1/2 cup mayonnaise
- 1 cup plain Greek yogurt
- 2 tablespoons dry ranch seasoning
- 2 tablespoons taco seasoning

INSTRUCTIONS

1. Cook pasta according to package.
2. Run under cold water and let cool slightly.
3. In a large bowl, combine the pasta with bell peppers, tomatoes, corn, black beans, cilantro, and green onions.
4. Combine all dressing ingredients and then combine with pasta mixture.
5. Stir well.
6. Serve and enjoy! Store in an airtight container in the refrigerator for 2-4 days.

NOTICE OF NAMES

Hidden within the text of the articles of this issue of *Volts & Jolts* are the names and account numbers of some Red Lake Electric Cooperative members. They will appear within the articles in parentheses as such (9999999.99 Willie Ray Member). If you find your name and account number, clip it out and send it with your next payment. You will be credited with \$5 on your electric bill.

NEW YEAR, NEW ENERGY EFFICIENCY INCENTIVES FOR 2024

Make your home more comfortable and energy efficient with help from Red Lake Electric Cooperative. Great rebates and incentives are available to help you upgrade your heating and cooling system, water heater and chargers for electric vehicles. Not sure where to start? Check out our rebate list below for heating and cooling options. Contact Red Lake Electric Cooperative for expert advice on improving your home's energy performance.

ELECTRIC WATER HEATER REBATES

Must be on off-peak

100 gallon or greater

\$500/unit

56-99 gallon

\$400/unit

55 gallon or less

\$150/unit

New construction (50 gallon)

FREE unit (primary residence only)

BONUS REBATES:

Add **\$250** if converting from natural gas or propane.

Add **\$100** for new building construction (shops, cabins, etc.).



ELECTRIC VEHICLE CHARGER REBATES

240V LEVEL 2 CHARGER

Must be on off-peak

Electric vehicle or hybrid

100% rebate

Commercial – Forklifts, Zambonis, etc.

\$50 per kW (\$750 max)



All equipment must be new and installed on Red Lake Electric Cooperative's system.

EQUIPMENT MUST BE INSTALLED ON RLEC'S OFF-PEAK PROGRAM.

Contact Member Services for more details!

218-253-2168

ELECTRIC HEATING REBATES

Must be on off-peak

ELECTRIC PLENUM HEATERS

Easily converts your existing fossil fuel furnace into a dual-fuel heating system. You are able to use the most efficient, cost-effective heating source – fossil fuel or electricity – at any time.

Rebate of \$50 per kilowatt (kW)

ELECTRIC THERMAL STORAGE HEATERS

Draws electricity during off-peak hours when it is cheaper. Heat is stored in specially designed bricks to provide comfort 24 hours a day.

Rebate of \$75 per kW

AIR-SOURCE HEAT PUMPS

(INCLUDING MINI-SPLIT DUCTLESS OPTION)

Works just like a central air conditioner in the summer. In the fall and winter, they provide super-efficient supplemental heat.



Up to 16 SEER: Rebate of \$300 per ton

17 SEER or greater: Rebate of \$600 per ton

GEOTHERMAL HEAT PUMPS

Provides the highest efficiency for space heating and cooling available today. The system transfers heat to and from the earth using only small amounts of electricity.



Closed loop: Rebate of \$400 per ton

Open loop: Rebate of \$200 per ton

ELECTRIC UNDERFLOOR BOILER

A popular off-peak option because the system transfers heat consistently across the floor to reach people and objects, providing both comfort and efficiency. Applications include electric boiler with hydronic tubing.

Rebate of \$75 per kW

OTHER ELECTRIC HEATING SYSTEMS

Options include electric baseboards, cove heaters, electric floor cable, mats and more.

Rebate of \$25 per kW