

POWERLINES

POLK-BURNETT ELECTRIC COOPERATIVE | MAY 2021



Co-op changes security lights to LEDs

by General Manager Steve Stroshane

Polk-Burnett upgraded security lights to LEDs

across our system, making your yard lights more energy efficient, longer lasting and reliable. Our LED replacement program spread costs over five years (2016-2020), as co-op linemen changed 2,359 high-pressure sodium and mercury vapor lights to LEDs.

LEDs are energy efficient, saving energy and power costs over time. LEDs also last longer, saving repair and replacement costs over time. While LEDs have an initial cost that's more expensive than the old lights, we believe LEDs are a good investment for the co-op because of energy and maintenance savings.

Ultimately, LEDs make good business sense: they are better for the bottom line and the environment.

I'd like to share more details about our LED upgrade and our positive return on investment in this Q&A with co-op engineer Jarod Boerst.

Q. How much energy will the co-op save with LED security lights? And what is the power cost savings?

Before the upgrade, estimated energy use for all security lights across the system was about 2 million kWh annually. The new LEDs use about 70% less energy, so systemwide energy use will decrease to 600,000 kWh. It's safe to say we will save more than 1 million kWh annually, which is more than \$70,000 per year in power costs!

The energy savings are extra impactful in the winter because security lights are on when wholesale power costs are highest, from 5 to 8 p.m.

The new LEDs have onboard memory and learn the dusk-to-dawn cycle of our region. If the optical sensor on the LED fails or gets blocked, the LED will operate based on information from the previous days. This saves us from making a maintenance trip to replace a faulty sensor and prevents the light from operating all day and wasting energy.

Beyond saving energy and money, LEDs put us on a better path for sustainability by reducing the light's contribution to carbon emissions.

Q. How long do LEDs last and how much will the co-op save in maintenance costs?

The old high-pressure sodium lights were rated for 24,000 hours of operation or 5.5 years at 12 hours a day. We expected to replace them every five years.

LEDs are rated for 100,000 hours of operation or 22 years at 12 hours per day. If everything goes as planned, we won't have to replace your new LEDs for 15 to 20 years!

Before the upgrade, the co-op spent an average of \$45,000 per year on security light maintenance. During the past five years as we worked to change the lights, maintenance dropped to \$10,000 per year. Since we are no longer proactively working on the lights, we expect this cost to rise and settle near \$20,000 per year over the life of the new LED. This is a savings of about \$25,000 per year on maintenance.

Q. Do the new LEDs pay for themselves in cost savings?

The LED replacement program cost about \$900,000 in materials and labor over five years. A little more than \$33,000 was covered

by energy efficiency grants, and we expect to save about \$95,000 per year on power costs and maintenance. This puts the payback just under 10 years.

Q. Will the member cost change?

The co-op covered the labor and material cost up front over the five-year transition period, so we initially kept security light fees constant for members. There was no additional charge to members to upgrade security lights to LEDs.

Going forward, security light fees will be evaluated as part of our regular rate studies. As a cooperative, Polk-Burnett always sets rates to cover actual costs, not to generate profit.

LEDs improve visibility and reduce light pollution

Beyond saving energy and money, LEDs provide a white light that shines downward, improving visibility and reducing light pollution. Polk-Burnett LEDs are approved by the International Dark Sky Association and were tested by a local lake association.

Brighten your yard dusk to dawn

Energy efficient LED security lights installed on Polk-Burnett poles operate from dusk to dawn. Members are charged a monthly fee for the light and may be charged for installation. Visit our website or call for details, 800-421-0283, ext. 308.

LEDs for your home and business

We also recommend LEDs for your home and business; they are better for your pocketbook and the environment. To help you save energy and money, Polk-Burnett offers rebates on new LED bulbs for residential, commercial, industrial and agricultural applications.

OFFICIAL NOTICE

83RD ANNUAL MEETING FRIDAY, JUNE 11, 1 P.M., ONLINE

SAFE, COMFORTABLE & CONVENIENT FOR CO-OP MEMBERS!

Join us on your computer or device. No special software required beyond an internet connection.

Agenda: State of the co-op & financial report, board election results & bylaw vote, member forum to voice your comment & ask questions

Presented by

Board President Ed Gullickson, General Manager Steve Stroshane & System Counsel Tim Laux

REGISTRATION OPENS MAY 1 ON POLKBURNETT.COM

Meeting link emailed to all who register a day or two before the meeting.

ALL MEMBERS WHO ATTEND WILL BE ENTERED TO WIN A \$50 ELECTRIC BILL CREDIT. 10 WINNERS!

For those who can't join us online, the meeting will be recorded for viewing at a later date. Printed reports will also be available upon request following the meeting.

We HOPE to host an IN-PERSON MEMBER APPRECIATION DAY later this summer when it's safe to gather in large groups again! Watch for updates.





IMPROVE ENERGY EFFICIENCY & COMFORT IN YOUR HOME WITH A GEOTHERMAL HEAT PUMP

Learn how **RENEWABLE THERMAL ENERGY** can help you save money on home heating and cooling. Plus, **RECEIVE a CO-OP REBATE and TAX CREDIT.**

GEOTHERMAL HEAT PUMP SEMINAR with Will Lange, THURSDAY, JUNE 17, 6:30 P.M., ONLINE *WaterFurnace*

Register by phone or online and we'll email you a meeting link, 800-421-0283, x595 or polkburnett.com



\$67,500 in co-op scholarships to Class of 2021

Congratulations to the winners of Polk-Burnett's 2021 Community Service Scholarship program. The **54 students** below will receive **\$1,250 each** to continue their education after high school, for a total of \$67,500 awarded to these **sons and daughters of co-op members**:



Co-op District 1

Nick Carlson, Osceola High School
Ben Neumann, Osceola High School
Allison Fogelberg, Osceola High School
Renee Vorndran, Osceola High School
Annalise Keezer, Osceola High School
Jenna Rondeau, Osceola High School
Megan Reigel, Osceola High School
Chloe Terpstra, Osceola High School
Lauren Ellefson, Osceola High School
Ellie Gillespie, Osceola High School
Abigail Skramstad, Somerset High School

Co-op District 2

Dawson Rosenow, Osceola High School
Abigail Jensen, Saint Croix Falls High School
Samuel Schiebel, Osceola High School
Grace Jensen, Luck High School
MaKenna Shannon, Saint Croix Falls High School
Ellen Brice, Saint Croix Falls High School

Co-op District 3

Kelsey Oman, Amery High School
Luke Julson, Amery High School
Nicolas Bush, Amery High School
Lilly Streich, Amery High School
Sydney Bosley, Amery High School
Anna Ganje, Amery High School

Co-op District 4

Samuel Wilson, Saint Croix Falls High School
Payton Christenson, Saint Croix Falls High School
Megan Novak, Amery High School
Jenna Hendrickson, Amery High School
Mitchell Symball, Turtle Lake High School
Raegan Sorensen, Unity High School
Nick Hahn, Amery High School
Emma Paulsen, Unity High School
Allison Stauner, Amery High School

Co-op District 5

Nicholas Richardson, State College Area High School
Zach Soule, Simley High School
Cedric Cloutier, Unity High School
Carsen Stenberg, Webster High School

Co-op District 6

Britta Hibbs, Luck High School
Lucas Keuchenmeister, Frederic High School
Haley Helgren, Cannon Falls High School
Dawson Van Meter, Luck High School
Sydney Atkinson, Siren High School

Co-op District 7

Emily Doriott, Webster High School

Co-op District 8

Joseph McMillin, Centennial High School
Sam Smith, Webster High School
Robert Whisler, East Ridge High School
Connor Hassing, Simley High School
Edwin Janssen, Webster High School
Hannah Lemieux, Siren High School
Madeline Richter, Champlin Park High School

Co-op District 9

Nicole Swift, Grantsburg High School
Abigail Hayman, Siren High School
Ellie Eklof, Frederic High School
Hannah Janssen, Webster High School
Dylan Roberds, Woodville-Tompkins High School

Since 1987, Polk-Burnett Electric Co-op has awarded more than \$846,000 to high school seniors.

Polk-Burnett's scholarship program does NOT affect electric rates; it is funded with unclaimed Capital Credits that otherwise would be forfeited to the state, and by the generosity of co-op members who donate Capital Credits to the scholarship fund.

If you would like to donate your Capital Credits to the co-op's scholarship fund, please call us or visit our website for an enrollment form. Learn more about Capital Credits and co-op scholarships on polkburnett.com.



Energy Efficiency Tip of the Month: Avoid placing lamps and TVs near your thermostat. The thermostat senses heat from appliances, which can cause your AC to run longer.

New construction this summer?

Congratulations! We know you are eager to hook up your electric service to power your lights, appliances, electronics and so much more. We've developed a simple checklist to help you through the process. Please call or visit polkburnett.com for new construction video, checklist, helpful resources and forms.



IF YOU RECEIVE AN EMAIL SURVEY, WE APPRECIATE YOUR FEEDBACK TO HELP US IMPROVE.

All members who submit a survey will be entered in a drawing for a \$50 bill credit.

Polk-Burnett is your local Touchstone Energy Cooperative. Reliable power with efficiency and extraordinary service.

Like us on Facebook. Follow us on Twitter.

800-421-0283 • polkburnett.com



Equal Opportunity Provider and Employer | Member Owned | Community Focused

