

## Staff Report

**Robyn Sonstegard**  
*Manager of Finance & Administration*

### AMI project

In last month's *Enlightener*, Manager Ellis mentioned that North Star has been preparing for a new AMI (advanced metering infrastructure) system. This is welcome news to employees at North Star, as problems with our current system have continually been popping up the last several months, which takes us away from other tasks we should be concentrating on. Our crews will install new meters beginning this spring, and full deployment of the new AMI is expected to take up to 18 months. We will focus our initial installation efforts in those areas where we are experiencing the most problems with the old system. When the crews are working on the conversion to the new system, they will have less time to troubleshoot the problems with the old one, so we may be relying on our members for month-end readings more than usual. We will attempt to reach out to those members by phone or email if we need an accurate reading. We appreciate your patience while we transition to the new system over the next several months.

We are excited for the many capabilities this new system will bring, which will allow us to be more efficient in both the office and out in the field. For you, the member, the new AMI system will provide dependable information regarding your own energy use. It will

(article continued on page 6)



## Operation Round Up® helps local programs

The North Star Community Trust board met Jan. 8 to review the 26 applications they received from organizations requesting funding for various programs. The total amount requested was more than \$37,000. The board had about \$12,000 to work with, so it



(article continued on page 5)

### 2019 Operation Round Up fund recipients



**Front row (left to right):** Jeff Nelson, Lake of the Woods School Backpack program; Tammie Doeblar, Lake of the Woods Prevention Coalition; Mary Lee Gens, Salvation Army Red Kettle Drive; Nancy Jewell, Williams Senior Citizens Day Center; Glen Lawrence, Lake of the Woods Veterans Memorial. **Second row:** Ann Ellis, North Star Electric Cooperative general manager, Brent Cole, Lake of the Woods School.



Trisha Wherley, Littlefork/Big Falls Elementary School; Carrie Claybundy, Littlefork Care Center; Pat Bjorum, Servants of Shelter; Linda Boelk, Littlefork Lutheran Quilters; Jeanine Alich, Northern Options for Women; Larry Warrington, North Star Electric Community Trust board; Ann Ellis, North Star Electric Cooperative general manager.

## In this issue:

|   |   |
|---|---|
| Board highlights / Office closed on Presidents' Day         | 2 |
| Manager's Report / Say goodbye to your old electric blanket | 3 |
| How to safely clean up and dispose of broken CFLs           | 4 |
| Operation Round Up® helps local programs (continued)        | 5 |
| Current electrical inspectors / 'Like' us on Facebook       | 6 |
| Help with your electric bill / Political leaders            | 7 |
| Would your home pass an electrical inspection?              | 8 |

FEBRUARY 2019 | Vol. 64, No. 2

The Enlightener (USPS 024959), is published monthly by North Star Electric Cooperative, Inc., 441 St. Hwy 172 N.W., Baudette, MN 56623-0719. Subscription price \$1/year. Periodicals postage paid at Baudette, MN 56623. POSTMASTER: Send address corrections to The Enlightener, North Star Electric Cooperative, Inc., P.O. Box 719, Baudette, MN 56623-0719.

#### OFFICERS AND DIRECTORS

**President** ..... Steve Arnesen  
**Vice President** ..... Michael Hanson  
**Secretary-Treasurer** ..... Lorraine Nygaard  
**Directors** ..... Shelley Spears, Randy Bergan,  
Tom Smith, Bruce Sampson  
**General Manager** ..... Ann Ellis  
**Editor** ..... Wayne Haukaas

Office hours: 7:30 a.m. to 4 p.m.  
Monday through Friday

**Baudette** ..... 218-634-2202 or 888-634-2202  
**Littlefork** ..... 218-278-6658 or 888-258-2008

For credit card payment, call 855-874-5354.  
Online billing information available via SmartHub app.

Electrical after-hours emergencies  
1-888-6OUTAGE (1-888-668-8243)  
or 634-2603  
e-mail us at [nsec@wiktel.com](mailto:nsec@wiktel.com)  
Visit our website at  
[www.northstarelectric.coop](http://www.northstarelectric.coop)

### North Star Electric Cooperative, Inc. **MISSION STATEMENT**

To improve the lives of our member-owners and community by responsibly providing clean, affordable, electric energy and other beneficial services while maintaining the very highest standards of performance and member satisfaction.

*This institution is an equal opportunity provider and employer.*

**DIGGING SOON?**



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.**

## Highlights from the **BOARDROOM**

These are the highlights from the board of directors' Nov. 20, 2018, board meeting. All board members were in attendance. In addition to routine motions, the board voted to accept the July 31, 2018, audit report, to approve moving forward with NISC's Work Management Solutions/ Mobile Workforce and to approve Manager Ellis' out-of-state travel to Washington, D.C., in January.

Staff reports included the safety report, the financial report, load management, dual heat sales, rebates, Operation Round Up®, new services and upgrades, line maintenance, right-of-way clearing, pole changeouts, outages, breaker testing, statewide and national election results and the new AMI (advanced metering infrastructure) conversion and

project kickoff. The proposed 2019 budget was reviewed in detail.

A visiting guest to the meeting was Alison Deelstra, regional vice president of National Rural Utilities Cooperative Finance Corporation (NRUCFC). She presented North Star's 2017 Key Ration Trend Analysis (KRTA) comparing North Star's financial performance to the rest of Minnesota and the nation.

Detailed minutes are available at the cooperative for member review. Regular board meetings are generally held the first Wednesday of every month. If you wish to speak with the board or have an item that you would like to have placed on the agenda, please contact Manager Ann Ellis at least two weeks in advance to be included on the agenda.

## Energy Efficiency Tip of the Month

### Laundry Tip:

Dry towels and heavier cottons separately from lighter-weight clothing. You'll spend less time running the dryer for lighter-weight items, which saves energy.

Source: [energy.gov](http://energy.gov)



**North Star Electric Cooperative**  
*will be closed on*  
**Monday, Feb. 18,**  
*in observance of*  
**Presidents' Day.**





**Ann Ellis**  
General Manager

# MANAGER'S REPORT

## What's on the horizon for 2019?

We have a full slate of new projects coming up. The work we will do this year will produce efficiency rewards down the road, starting with the deployment of the new AMI (automated meter infrastructure) system. We will have 9,000 meters to exchange, and more than 2,000 of them are inside member-owners' homes. To efficiently handle this huge process, we will also convert our service order process from sheets of paper the crews carry around to a paperless version that will utilize a smart phone's camera to scan meter barcodes, take pictures of meter readings and make the changeout process all-around much smoother. If just two minutes are saved for each meter exchanged in this process, the efficiency will pay for this software. In addition, efficiency improvements will continue to pay off in the years to come.

As with any big change, there is much work to do to prepare for a seamless transition. I'd like to take this opportunity to thank all of the employees because each one has a vital role in the success of this big-ticket AMI project.

## Estimated bills

The aged AMR system is giving us heartburn again. If the bill you receive is estimated, you have some choices. You can either accept the estimate and wait for an actual reading on a future bill to correct the estimate, or you can read your meter (and if you have off-peak electric heat, read that meter as well), and call Patsy at **888-634-2202** to have her correct it for you. She can also be reached at **Patsy.O@northstarelectric.coop**.

## MyMeter alerts

If you use our MyMeter app to receive text (or email) alerts about your daily kWh usage, please remember that

when a meter does not report in, that means the information cannot be transferred to our office because either there is an outage (our old AMI system sends data across the power lines), or there is a systems problem communicating the reading back to the office (which is the issue we have been experiencing). When no data is transferred to the app, no notification is sent.

No one will be happier than all of us employees when the new AMI system is deployed and meters are reporting reliably again. Thank you for your patience as we make this transition.

## Operation Round Up®

I want to do a shout-out to our volunteers serving as Operation Round Up Trust board members. They come so well-prepared to discuss the merits of every application, and they come with a number in mind of what they think the proper donation might be for each one. Usually, they are all pretty close to being on the same page, and if they aren't, there is great discussion to arrive at a unanimous decision.

Over the past 12 years, members have rounded up their bills to provide \$226,250 to support charitable organizations that are making positive impacts in our local communities. Twice a year, the trust board meets and distributes about \$9,000 more. Kudos to this board, to all of the volunteers who are committed to their communities by keeping their charitable organizations strong, and to all of you many member-owners who support this opportunity to make a difference in the lives of others.

At your service we remain ... *Ann*



## Say goodbye to your old electric blanket

If your electric blanket has seen its better days, especially if it's a decade old or more, it's time to replace it. Throw it out and don't donate it, as it could be a fire hazard. Older electric blankets are more apt to be worn through or damaged, and they and their 100 feet of wiring account for thousands of worldwide injuries and deaths each year.

Fans of toasty and warm beds should inspect their electric blanket frequently, regardless of its age. Occasionally, a newer blanket or even one that's fresh out of the bag could have a wiring issue, so always test your blanket before using for the first time, and once you start using it, inspect it often.

When inspecting your plug-in blanket or throw, the U.S. Consumer Product Safety Division recommends looking for cracks or breaks in wiring, plugs and connectors. Also look for dark, charred or frayed spots on either side of the blanket (130-05-001-03, Ed Arnesen). If your electric blanket has any of these characteristics, throw it away, as it may be a potential fire hazard.

When purchasing a new one, make sure it has been tested by a reputable testing laboratory such as Underwriters Laboratories (UL). Also be sure to read

(article continued on page 7)



## LED lighting rebate form



ENERGY STAR® bulbs highly recommended  
(Rebates will not exceed 50 percent of purchase price)

Complete this form, attach a copy of your purchase receipt and mail to: North Star Electric Cooperative, P.O. Box 719, Baudette, MN 56623 Attn: Wayne

(Rebates will be in the form of a credit on your electric account)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone #: \_\_\_\_\_ Other Phone #: \_\_\_\_\_

North Star Electric account number: \_\_\_\_\_

Name of retailer: \_\_\_\_\_

Replacing 40-60W bulb: (\$2/bulb rebate)  
Number of bulbs: \_\_\_\_\_

Replacing 75-100W bulb: (\$4/bulb rebate)  
Number of bulbs: \_\_\_\_\_

## Energy saving comparison

(Incandescent vs. LED light bulbs)



| Incandescent   | LED                                  |
|--|--------------------------------------|
| 100 watt   | 15 watt                              |
| 8 hours/day  | 8 hours/day                          |
| 31 days/month  | 31 days/month                        |
| Equals 24,800 watts (24.8 kWh)   | Equals 3,720 watts (3.7 kWh)         |
| At 12.2 cents/kWh + 6.875% sales tax   | At 12.2 cents/kWh + 6.875% sales tax |
| <b>Equals \$3.23/month</b>   | <b>Equals \$0.48/month</b>           |
| <b>Savings per bulb per month with LED = \$2.75</b>  |                                      |
| <b>Cost of LED bulb after rebate = \$4</b><br>(at either North Star Electric Cooperative office) |                                      |

If you know of any other energy-saving device that will pay for itself this quickly, please let North Star know about it, and we will have it in a future Enlightener.

## How to safely clean up and dispose of broken CFLs

Compact Fluorescent Lamps (CFLs) are an affordable and efficient alternative to traditional incandescent light bulbs (251-36-118-04, Steve Eskeli). CFLs last longer than incandescent bulbs, require a fraction of the cost to use and lead to fewer carbon dioxide emissions.

CFLs do contain a small amount of mercury. To put it in perspective, you would have to break 100 CFLs to equal the amount of mercury in an old-style thermometer, according to the Environmental Protection Agency (EPA). The level of mercury in a CFL is nothing to fear, but you should handle them with care. When you are done with a CFL, take it to an approved drop-off. Retailers, including many hardware stores, will properly dispose of CFLs if you drop them off.

If you break a CFL, follow these clean up and disposal procedures:

- ☐ Do not vacuum the broken bulb – unless broken glass remains after all other cleanup steps have been taken – because it could spread mercury-containing powder or mercury vapor.
- ☐ Have children and pets leave the room.
- ☐ Before you start to clean up the broken bulb, shut off the heat or air conditioning to prevent the mercury from circulating. Then open a window and leave the room for 5 to 10 minutes.

- ☐ Using a stiff piece of paper, sweep the broken pieces into a glass jar with a metal lid. Place the cardboard in a sealable container (jar or plastic bag).
- ☐ Use sticky tape, such as duct tape, to clean up the remaining pieces; put the tape in the jar. If the CFL broke on a hard surface, wipe it down with a damp cloth and place the cloth in the jar or plastic bag.
- ☐ If the CFL broke on carpet and you cannot pick up all the pieces, use a vacuum, but dispose of the vacuum cleaner bag when you are done.
- ☐ Be sure to place the jar or bag with broken bulb and cleanup materials outside in a trash container or protected area until it can be disposed of properly. Some recycling centers accept CFLs – but not all of them do. The EPA suggests checking with your local and/or state household hazardous waste authority for disposal requirements in your area.
- ☐ Keep the heating or air conditioning system off and continue to let the room air out for several hours.



For more information on energy safety and efficiency, visit [EnergyEdCouncil.org](http://EnergyEdCouncil.org).

## Operation Round Up® helps local programs (continued from page 1)

was not an easy task selecting which group would get funding and what amount they would receive.

Many local programs and organizations benefit from Operation Round Up®, a voluntary member-driven fundraising program of North Star Electric Cooperative, Inc., that is designed to provide financial assistance for worthwhile projects and charities in the area. Donations are given to organizations to help make the area a more pleasant and safe place to live.

All funds for Operation Round Up are contributed by the member-owners of North Star Electric, and the money is put into a trust fund that is separate from electric accounts. The trust is administered by its own board of directors comprised of people from across the area.

Operation Round Up directors are appointed by North Star's board members and must be members of the cooperative. The cooperative's general manager is



### North Star Electric Community Trust Board members

**Seated from left to right:** Zelpha L. Crawford, *District 4, Loman*; Mary Ellen Lehman, president, *District 5, Littlefork*; Gretchen Thompson, vice president, *District 2, Baudette*. **Second row:** Margie Sporlein, secretary/treasurer, *District 3, Williams*; Larry Warrington, *District 7, Kabetogama*; Julie Lepisto, *District 6, Big Falls*; and Tony Radniecki, *District 1, Roosevelt*.

a nonvoting member of the board.

Organizations from the area may apply for a donation from the Operation Round Up Trust. The applicant must be charitable in nature and be working to meet a need in our area. The Operation Round Up board meets twice a year and decides if an application meets the guidelines of the trust and if funds are available.

If a member chooses to be part of Operation Round Up, their bill is “rounded up” to the next highest dollar. For example, if a bill is \$96.47, the computer will round up the bill to \$97. The additional 53 cents will be placed in the trust and distributed to local charitable and community-based programs.

About 80 percent of North Star's members have chosen to participate in Operation Round Up and it is expected that contributions will be about \$18,700 each year. That money goes right back into our community.

The average annual contribution from a member is about \$6. The most that could be contributed in a year by a member is \$11.88 (12 months x 99 cents).

If a member of North Star Electric or a nonmember of the cooperative would like to make an additional contribution, please give our office a call.

**'LIKE US' ON  
FACEBOOK  
TO STAY  
UP-TO-DATE!**



Like your cooperative at  
**www.facebook.com/  
NorthStarElectric** for outage  
updates during winter storms  
and other useful information.

*At the January meeting \$10,007 in Operation Round Up funds were distributed to various qualifying programs and organizations throughout the area, including:*

|  |                                 |
|--|---------------------------------|
| <b>Lake of the Woods Food Shelf</b>            | Food for hunger                 |
| <b>Falls Hunger Coalition</b>                  | Senior Select                   |
| <b>Williams Senior Citizens Day Center</b>     | Feeding senior citizens         |
| <b>Koochiching Aging Options</b>               | Senior Wheels program           |
| <b>Servants of Shelter Koochiching County</b>  | Shelter service                 |
| <b>Lake of the Woods School</b>                | Backpack program                |
| <b>LSS Senior Nutrition Program</b>            | Emergency weather-related meals |
| <b>Salvation Army Lake of the Woods County</b> | Red Kettle Drive                |
| <b>Salvation Army Koochiching County</b>       | Community service               |
| <b>Littlefork Lutheran Church</b>              | Comfort bags                    |

|   |  |
|---|--|
| <b>Littlefork/Big Falls Elementary School</b>   | Dyslexia curriculum                    |
| <b>Northern Lights First Responders</b>         | Continuing education                   |
| <b>Lake of the Woods Veterans Memorial Fund</b> | Veterans Memorial Park                 |
| <b>Kabetogama Fire Department</b>               | Heli-pad for life flight lighting      |
| <b>Littlefork Care Center</b>                   | Nursing training manikin               |
| <b>Northern Options for Women</b>               | Earn While You Learn program           |
| <b>Lake of the Woods School</b>                 | Portable pitching mound                |
| <b>LOW Prevention Coalition/S.T.U.D.</b>        | Students Teaching Uniform<br>Decisions |
| <b>Borderland Alano Club</b>                    | Community service                      |



# Staff Report (continued from page 1)

also mean faster outage restoration, and potential opportunities to be rewarded with a lower electric bill in exchange for using electricity more when the demand on the grid is low, and reducing usage during peak times.

## Co-op Knowledge Scholarship

Believe it or not, spring is right around the corner! If you are the parent or guardian of a high school senior, you know your student is probably thinking about upcoming events like prom and graduation. Along with encouraging your student to enjoy their last moments of high school, also encourage them to participate in our Cooperative Knowledge Scholarship competition this spring. This scholarship competition is funded with unclaimed capital credits, and is a great way for North Star to support the youth throughout our service area and help them with college expenses. North Star Electric Co-op will award one \$1,000 scholarship and four \$400 scholarships to the students who score highest on the cooperative knowledge test. All students scoring 60 percent or better on the test will be entered into a drawing for eight \$100 cash prizes. Testing information and study materials for eligible students will be available at the Warroad, Lake of the Woods, International Falls, Indus and Littlefork-Big Falls Schools this spring.

**This month's sneak peek question is a fill-in-the-blank type question, and it is shown above.**

## Sales tax exemption

If you heat your home primarily with electricity, residential electric heat usage is exempt from Minnesota sales tax during the months of November through April. If you have off-peak electric heat, the off-peak portion of your bill is tax exempt during those months. Most likely, we currently have a sales tax exemption form on file for you, so you don't need to send us one; however, if you haven't ever given us a sales tax exemption form, please let us know. We can mail you one, or you can find it on our website under the Forms tab. If you have any questions on this subject, please call Patsy at **218-634-2202**.

## Finances

Now that 2018 is in the history books, I'm pleased to report that we had a solid year financially-speaking. Final year-end margins finished better than anticipated, thanks to stronger than expected sales (708-08-004-06, Wayne Summerland). We hope for the sales trend to continue, which will mean no rate increases in 2019. Please remember that when you choose electric, you help to keep the co-op's rates stable.

**Question:** Name one of the seven directors, who are elected by everyone who buys electricity from North Star Electric Cooperative (the member-owners), to govern North Star:

**Answer:** Any of these seven member-owners:



Steve Arnesen  
District 1  
Roosevelt, Minn.



Shelley Spears  
District 2  
Baudette, Minn.



Randy Bergan  
District 3  
Williams, Minn.



Michael Hanson  
District 4  
Birchdale, Minn.



Tom Smith  
District 5  
International Falls, Minn.



Lorraine Nygaard  
District 6  
Big Falls, Minn.



Bruce Sampson  
District 7  
Ray, Minn.

## Current electrical inspectors

State law requires that every new electrical installation in any construction, remodeling, replacement or repair shall file a certificate for inspection and be inspected by a Minnesota electrical inspector. For more information, go to Minnesota Department of Labor and Industries website ([dli.mn.gov](http://dli.mn.gov)) and go to the electrical page.

• **Lake of the Woods, St. Louis and Koochiching counties:**  
Curt Collier - Email: [cgcollier67@gmail.com](mailto:cgcollier67@gmail.com)  
Phone: (218) 966-5070  
Call to set up an appointment between 7 a.m. - 8:30 a.m. (Mon. through Fri.)

• **Roseau county:**  
Bryan Holmes  
Phone: (218) 686-1413  
Call to set up an appointment between 7 a.m. - 8:30 a.m. (Mon. through Fri.)

# Say goodbye to your old electric blanket

(article continued from page 3)



and follow the manufacturer's instructions. When using, it's better to warm your bed with the blanket before going to bed (don't leave it unattended, though), and turn it off before climbing in.

Safe Electricity reminds you even if your electric blanket is in good shape, it still requires a little extra care compared to a traditional blanket:

- Don't allow anything on top of the blanket when in use, like a comforter, bedspread or even pets, which may cause the blanket to overheat. In addition, pet claws can cause rips and tears, which may
- expose the wiring and create shock and fire hazards.
- Do not use an electric blanket that is wet, soiled or wrinkled.
- Do not tuck in an electric blanket, which can cause excessive heat build-up.
- Don't store the blanket folded; instead, roll it for storage, which puts less stress on the internal wires. A better option is to store flat if you can, such as on a spare bed.
- Do not leave any heating appliance unattended.
- Don't wash it often. Repeated washings can damage the electrical circuitry. (Follow proper instructions when washing; usually the spin cycle is not recommended.)
- Do not sleep or lounge on top of the electric blanket.

*Learn more about heated appliance safety and other safety tips at [www.SafeElectricity.org](http://www.SafeElectricity.org).*



## Problems paying your electric bill?

Energy assistance may be available!

If you are receiving a low income or are suffering from a temporary financial shortfall, the following agencies may be able to assist you with your electric bill. We urge you to contact them immediately to avoid disconnection if you feel you are eligible for aid.

### Lake of the Woods County Social Services

206 8<sup>th</sup> Ave. SE, Suite 200  
Baudette, MN 56623  
634-2642

### Northwest Community Action Council

P.O. Box 67  
Badger, MN 56714-0067  
800-568-5329

### Koochiching County Community Services

1000 5<sup>th</sup> St.  
International Falls, MN 56649  
283-7000

### Kootasca Community Action, Inc.

2232 2<sup>nd</sup> Ave. E.  
P.O. Box 44  
International Falls, MN 56649  
283-9491 or 800-559-9491

### Kootasca Community Action, Inc.

Grand Rapids, MN 55744-3984  
Toll free 877-687-1163  
Direct 218-999-0800  
Fax 218-999-0220

### Arrowhead Economic Opportunity Agency

702 3<sup>rd</sup> Ave. S.  
Virginia, MN 55792  
800-662-5711

## NORTH STAR ELECTRIC COOPERATIVE POLITICAL LEADERS

### Federal legislators

#### President Donald Trump

The White House  
1600 Pennsylvania Ave. NW  
Washington, D.C. 20500  
[www.whitehouse.gov](http://www.whitehouse.gov)  
[president@whitehouse.gov](mailto:president@whitehouse.gov)  
202-456-1111

#### Senator Tina Smith

309 Hart Senate Office Building  
Washington, D.C. 20510  
[www.smith.senate.gov](http://www.smith.senate.gov)  
202-224-5641  
Fax: 202-224-0044

#### Senator Amy Klobuchar

302 Hart Senate Office Building  
Washington, D.C. 20510  
[www.klobuchar.senate.gov](http://www.klobuchar.senate.gov)  
202-224-3244  
1-888-224-9043 (Minnesota office)  
Fax: 202-228-2186

#### Congressman Pete Stauber

2366 Rayburn House Office Building  
Washington, D.C. 20515  
[www.stauber.house.gov](http://www.stauber.house.gov)  
202-225-6211

#### Congressman Collin Peterson

2204 Rayburn House Office Building  
Washington, D.C. 20515  
[www.collinpeterson.house.gov](http://www.collinpeterson.house.gov)  
202-225-2165  
Fax: 202-225-1593

### State of Minnesota legislators

#### Governor Tim Walz

Capitol Building, Room 130  
75 Rev. Dr. Martin Luther King Jr. Blvd.  
St. Paul, MN 55155  
800-657-3717  
Email: [Gov.elect@state.mn.us](mailto:Gov.elect@state.mn.us)

#### Senator Tom Bakk

2221 Minnesota Senate Bldg.  
95 University Avenue W.  
St. Paul, MN 55155  
651-296-8881  
Email: [www.senate.mn/members](http://www.senate.mn/members)

#### Senator Paul Utke

3403 Minnesota Senate Bldg.  
95 University Avenue W.  
St. Paul, MN 55155  
651-296-9651  
[sen.paul.utke@senate.mn](mailto:sen.paul.utke@senate.mn)

#### Senator Mark Johnson

2105 Minnesota Senate Bldg.  
95 University Avenue W.  
St. Paul, MN 55155  
651-296-5782  
[sen.mark.johnson@senate.mn](mailto:sen.mark.johnson@senate.mn)

#### Representative Matt Grossell

429 State Office Building  
100 Rev. Dr. Martin Luther King Jr. Blvd.  
St. Paul, MN 55155  
651-296-4265  
[rep.matt.grossell@house.mn](mailto:rep.matt.grossell@house.mn)

#### Representative Dan Fabian

359 State Office Building  
100 Rev. Dr. Martin Luther King Jr. Blvd.  
St. Paul, MN 55155  
651-296-9635, 888-727-0979  
[rep.dan.fabian@house.mn](mailto:rep.dan.fabian@house.mn)

#### Representative Rob Ecklund

311 State Office Building  
100 Rev. Dr. Martin Luther King Jr. Blvd.  
St. Paul, MN 55155  
651-296-2190  
[rep.rob.ecklund@house.mn](mailto:rep.rob.ecklund@house.mn)



# Would your home pass an electrical inspection?



If you're getting ready to sell your home or just wondering how electrically sound it is, there are some general guidelines out there to assess

the condition of your home's wiring and electrical bones. Although it varies depending on where you live, most local codes follow the National Electric Code (NEC).

The NEC is an industry-specific, jargon-filled document that outlines required practices for all aspects of residential and commercial electrical installation. Don't worry, you don't have to google it and read it from cover to cover, but know that your local code could vary. Local code always wins out when there are variances, so be sure to check with your qualified electrician or local building department (start with your city or town) for specific code requirements.

Electrical malfunction is dangerous. U.S. fire departments responded to an estimated average of 45,210 reported U.S. home structure fires involving electrical failure or malfunction per year from 2010 to 2014, according to the National Fire Protection Agency. The home fires resulted in 420 deaths, 1,370 injuries and an annual \$1.4 billion in direct property damage.

In general, here are some all-house guidelines that an inspector would look for; remember they may or may not align with your local electrical code but they are NEC-mandated. If your home has any of the following defects, it may not pass an electrical safety inspection:

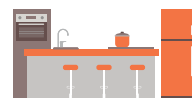
- Old knob-and-tube, along with BX cable wiring, common in the U.S. from about 1880 to 1930
- New lights and receptacles installed into old wiring
- Overcrowded wires; i.e. too many wires bundled together producing excess heat
- Spliced wires that were illegally installed (they must be installed by an approved method)
- Broken or missing carbon monoxide detectors or smoke alarms (whether smoke alarms must be hard wired depends on the age of the home, and in most cases, whether any home improvement projects required a permit)
- Noninsulated/noncontact-rated recessed lights that touch attic insulation, which is a fire hazard
- Improper overcurrent protection, which means the breaker or fuse is too large for the wire rating

- Improper grounding and bonding of electrical panels and devices

**Some other room-specific things to look for include:**

## Kitchen

- Does your electric range, cooktop or oven have a dedicated 240-volt circuit?
- Is the breaker for the range, cooktop or oven sized correctly?
- Does your island have its own outlet? (The NEC has outlet requirements for kitchen islands, peninsulas and countertops.)
- Does your microwave, refrigerator and garbage disposal each have its own circuit?



## Bathroom

- Are outlets GFCI (ground fault circuit interrupters)? GFCIs are designed to protect people from electric shock around water.
- Do your combination fan/lights have their own 20-amp circuit?
- Do the light fixtures in the shower or tub area have a "lens" cover? Are they moisture resistant?



## Other rooms (living, dining, family, bedrooms)

- Does each room have a wall switch installed beside the entry door?
- Are outlets installed no farther than 12 feet apart?
- Are ceiling fixtures controlled by a wall switch and not just a pull chain?



There are also hallway, staircase and garage code requirements, as well as those for the electrical service panel and wiring. Check with your qualified electrician or the city or town where you live for specific code requirements in all areas of your home.

## Arc-Fault Circuit Interrupters (AFCI)

Many prominent electrical and homebuilding experts believe that using arc-fault circuit interrupters (AFCI) in these areas of homes has a significant impact on homeowner safety and that they reduce the number of lives lost in home electrical fires. An AFCI is designed to detect series faults, line to neutral faults and line to ground faults, effectively stopping a fire before it starts.

**For more about electrical safety, visit [SafeElectricity.org](http://SafeElectricity.org).**