Fifty things that get better with age

In September, a Capital Electric Cooperative line crew replaced a small stretch of underground power line cable that had gone bad over time and was causing some power outages. In this month’s issue, learn how age can contribute to the performance of your electric distribution system, and how technology — and leather boots — keep improving over time.
A few years ago, Prevention magazine published an article titled, “50 things that get better with age.” Love, seasonal allergies and leather boots are apparently the top three things that can improve over time. I searched but did not find a follow-up article titled, “50 things that get worse with age.” If they had drafted one, the list might have included cracking knees, sensitive teeth — and much further down the list — power line cable.

Every year, your electric cooperative budgets to replace aging infrastructure including power lines and poles. The weather contributes to wear and tear on our electric distribution system, and a particular stretch of line may not be as reliable as when it was first built. Age
contributes to the decline, as well. Just as eyesight becomes less sharp over time, older infrastructure may not perform as well, and it eventually needs to be updated or replaced.

In September, one Capital Electric Cooperative line crew updated a small stretch of underground cable in northeast Bismarck. This summer, members in the area had experienced some power bumps and blinks, which indicated a fault in the line. Installed in 1977, the cable was starting to go bad. Journeyman Linemen Jeremy Ensign, Matt Hagen and Braden Martin worked together to trench and lay new cable and route it to a riser pole, which connects the underground and overhead power lines. Like most technology that improves with age, this cable will likely last longer than the nearly 40 years of the now-retired cable.

If you want to know if love deepens over time, we suggest looking into the eyes of your family pet for the answer. If you want to know if your allergies will improve as you age, consult your family physician. If you want to know if leather boots improve with use, you can certainly ask your favorite lineman at Capital Electric Cooperative. They wear them every day on the job, as they work to build and maintain the electric distribution system that provides affordable and reliable service to our member-owners.

Thank you, Capital Electric Cooperative members Joe and Beverly Schatz, for sharing how your treasures grow!
Need Help with Heating Costs?
LIHEAP can help.

The Low Income Home Energy Assistance Program (LIHEAP) helps eligible low-income households with home heating costs.

- Heating assistance
- Weatherization services (insulation, weather stripping, etc.)
- Furnace and chimney cleaning
- Furnace repair and replacement
- Emergency assistance

Applications are accepted from October 1 through May 31 for each heating season.

For help filling out and submitting the LIHEAP application, call 1-800-823-2417 ext: 158.

Cooler weather is on the way and the heating season is upon us.

Is your electric meter breaker on?
Members, if your home or business has a sub-meter for an off-peak or all-electric heat rate, please make sure your heat meter breaker is turned on inside your electric panel. If the breaker is off, your electric heat credit will not be reflected on your bill. Thank you.

Off-peak rates run Oct. 1 through April 30
Off-peak electric heat utilizes the concept of a dual-energy heating system, which simply uses two sources of fuel rather than one. With off-peak electric heat, electricity is the primary heat source. Using a control system, Capital Electric can switch from one heating source to another automatically. This maximizes efficiency and allows your co-op to offer you lower heating rates!

For more information on off-peak electric heat and Capital Electric’s heating program and incentives, visit www.capitalelec.com and click on Energy Efficiency and Load Management Programs.

LEAVING FOR THE WINTER?
Please contact our billing department at 701-223-1513 to let us know you are going to be gone. Without notification, we may estimate your meter reading, which could result in being over billed for several months. Thank you!
WRITE A WINNING ESSAY AND WIN A TRIP OF A LIFETIME!
An all-expense-paid trip to WASHINGTON, D.C.

- To enter the essay-writing contest, you must be a sophomore or junior in high school.
- You and your parents or guardian must be served by Capital Electric Cooperative.
- If you have a question, contact Wes Engbrecht, Capital Electric, at the address listed below, or call 701-223-1513 during regular business hours.
- The deadline is Jan. 31, 2017. Email entries to wese@capitalelec.com or mail to: Youth Tour Essay Contest, Capital Electric Cooperative, 4111 State St., Bismarck, ND 58502-0730.

ESSAY QUESTION:
Democracy is the foundation of our American way of life and of cooperative enterprise. The fundamentals of democracy include voter participation, political party affiliation, and public debate of issues. Describe what you think makes our current democracy strong, and provide suggestions for ways our democracy can be made stronger and more effective.

CHECK OUT THE ESSAY-CONTEST GUIDELINES AT www.ndyouhtour.com and www.youthtour.coop

TOP 3 REASONS TO ENTER THE ESSAY-WRITING CONTEST
1. All-expense-paid trip to Washington, D.C., compliments of Capital Electric Cooperative.
2. A whole week to visit unforgettable historic monuments, museums and the U.S. Capitol.
3. A learning experience you’ll never forget.
Capital Electric Cooperative strives to provide you with the most reliable electric service. However, outages do occur and they are an unavoidable aspect of providing electricity. Therefore, we would like to illustrate the process of how we restore your power during an outage.

The flow of electricity

Capital Electric Cooperative purchases its electricity from Central Power Electric Cooperative, Basin Electric Power Cooperative and Western Area Power Administration (Western). The purchased power is delivered along a number of transmission lines that deliver power to 22 substations within the Capital Electric service area, and distributed in different forms including three-phase, two-phase and single-phase along a number of main distribution lines. From that point forward, the distribution lines are tapped. The final point of delivery is to a member's individual service.

WHAT HAPPENS WHEN YOUR LIGHTS GO OUT?

(A simplified look at how we restore power following a major outage)

Capital Electric Cooperative strives to provide you with the most reliable electric service. However, outages do occur and they are an unavoidable aspect of providing electricity. Therefore, we would like to illustrate the process of how we restore your power during an outage.

This article examines the repair process in one isolated area, but an important fact to remember is that with a typical outage, there are usually several areas affected at the same time. Consequently, this effort occurs across our service area simultaneously.

Capital Electric typically follows a basic outage restoration principle when it comes to restoring power: priority goes to the lines that will get the most people back in service the quickest. This usually begins with main lines from the substations that can affect 200 to 600 members. It continues out to tap lines that may affect 30 to 200 members, and then to individual service lines affecting just one to five members.
STEP 1: REPAIRS START WITH THE MAIN LINE

The substation is energized but a main distribution line is damaged near the substation, leaving most members without power. First, all damaged tap lines need to be isolated from the main line and then repairs can begin on the main line from the substation. A large number of members (shown with orange arrows) will have power returned once the main line is fixed. All other repairs would be pointless until this line is restored, as it feeds all the other lines.

STEP 2: WITH THE MAIN LINE REPAIRED, THE LINE CREW CAN ISOLATE OTHER DAMAGE

With the main line repaired (now shown in red), the line crew can isolate other damage and prioritize repairs. Though a couple of repairs were closer, fixing the line that serves this subdivision down the road will get a larger number of members online more quickly.

STEP 3: TAP LINES SERVING THE MOST MEMBERS TAKE PRECEDENCE OVER THOSE SERVING FEWER MEMBERS

Moving back down the road to fix this tap line will restore electricity to the three homes marked with arrows.

Next on the list for the line crew is a tap line serving two homes and a barn. The move probably doesn’t make the folks in the blue house too happy. They’ve seen the crew driving by their home and working right across the road. They see lights in the homes of all their neighbors, but they themselves don’t have power. That’s because even though electricity is coming to their pole (that happened with the first repair in Step 1), the service line from their pole to their meter is damaged. Individual repairs come after all distribution and tap lines are restored.

STEP 4: INDIVIDUAL REPAIRS ARE FINISHED LAST

Only after the tap lines are repaired does the crew start work on individual service lines. The crew could have stopped at the blue house to restore power any time after the first main line was repaired and electricity was flowing to the pole nearby. But it is more efficient for the crews to move down the road and restore power to dozens of homes in the same amount of time.
Board minute excerpts
Tuesday, Sept. 27, 2016

The regular meeting of the Board of Directors of Capital Electric Cooperative, Inc., was held Tuesday, Sept. 27, 2016, at co-op headquarters in Bismarck, North Dakota, pursuant to due notice to all directors.

All of the directors were present at that time.

Financial review: Prior to the board meeting, Directors Haugen-Hoffart and Hollenbeck reviewed the August 2016 check register and expenditures. They reported all checks were in order.

It was moved, seconded and carried to approve August expenditures in the amount of $4,475,181.87.

Business Department report:
The Business Manager presented the financial and statistical report to the Board. The total kilowatt-hour (KWH) sales for August 2016 were above budget by 8.35 percent. The actual monthly electric revenue is above budget by 6.39 percent. Year-to-date KWH sales are under budget by 2.5 percent and electric revenue is under budget by 2.1 percent.

The Basin Electric Power Cooperative rate increase was effective Aug. 1, 2016, and as a result, the total margin for August was -$626,502 compared to the budgeted margin of -$325,256, below budget by $301,246.

Capital Electric began billing 108 new services in August, bringing our active services to 19,651 versus 18,964 at this time last year, or a net increase of 687 accounts over the last 12 months.

The Manager reviewed the comparison of actual-to-budgeted expenses and power costs for the month of August 2016. Accounts receivable balances as of Sept. 26, 2016 were also reviewed.

CFC Integrity Fund: The Cooperative received its final dispersion from the National Rural Utilities Cooperative Finance Corporation (CFC) Integrity Fund in relation to the legal dispute with the Public Service Commission/Montana-Dakota Utilities regarding the Menards Corporation (CFC) Integrity Fund in Utilities Cooperative Finance dispersion from the National Rural Utilities Cooperative received its final.

Accounts receivable balances as of Sept. 26, 2016 were also reviewed.

Negotiations and Strategic planning:

Policy Review: Policies were reviewed as follows:

Policy 1-5 Capital Credits – Retirements
Patrie left at this point in the meeting at 11:35 a.m.
Policy III-6 Line Extension
Policy III-6a Multiple Use Line Extension

Strategic planning: It was moved, seconded and carried to approve Integrity Partners as the strategic planning facilitator.

Vilhauer left at this point in the meeting at 12:50 p.m.

Central Power: The Manager reviewed the Member Advisory Committee meeting.

Basin Electric: Negotiations and reassessment of the Tower Property is under review.

Adjournment: There being no further business to come before the meeting, without objection, the regular meeting was adjourned. 

CAPITAL ELECTRIC COOPERATIVE board minutes report

Board of Directors:
Dwight Wrangham, Pres. Bismarck
Arlene Olson, V. Pres. Wing
Sheri Haugen-Hoffart, Sec.-Treas. Bismarck
Rodney Eckroth, Asst. Sec.-Treas. Bismarck
Kyle Hilken Wilton
Rex Hollenbeck McClusky
Richard Koski Wing
William Patrie Bismarck
Deon Vilhauer Bismarck
Paul Fitterer, Mgr. Bismarck

Board Meeting:
Monday-Friday: 8 a.m.-5 p.m.
Office phone: 701-223-1513
Toll-free: 888-223-1513
Pay-by-Phone: 1-877-853-5928
Day—Night—Weekend
TROUBLE CALL: 223-1513

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A Touchstone Energy Cooperative