



Why animals and power don't mix

By Megan McKoy-Noe



Alan W. Wattles

Across The President's Desk

What do birds, squirrels, and power outages have in common? Animals trigger 11 percent of power outages across the nation.

"Our members sometimes shake their heads in disbelief when I blame a squirrel for an outage," shares Alan Wattles, President/CEO at Monroe County Electric Cooperative (MCEC). "We spend substantial dollars every year addressing animal management and removal."

To ensure safe, reliable power delivery (and healthy wildlife), MCEC goes to great lengths to keep animals away from electricity.

Animal Attraction

Electricity seeks the fastest route to the ground. Utility pole insulators keep power flowing safely in your neighborhood, but unwitting squirrels offer high-voltage electricity a way around insulators. If a squirrel doesn't jump far enough, a powerful electric current—up to 12,500 volts—makes the squirrel a conduit to the ground. The squirrel does not survive.



If a squirrel's body falls to the ground, the power blinks but stays on. If it falls into equipment, like a transformer, safety measures shut off power. MCEC sends a lineworker to remove the animal and restore power.

Squirrels are the main culprit, but they're not alone. Opossums, raccoons, foxes, snakes, birds, and other animals trigger outages, too.

Animal attraction to power infrastructure hurts animals and leaves frustrated MCEC members in the dark. Clean up, recovery, and restoring power costs utilities between \$15 and \$18 million a year, estimates Tyco Electronics, a utility equipment firm.

Grid Guardians

No one wants wildlife hurt. Eighty percent of electric co-ops,



public power districts, and public utility districts install animal guards to protect equipment and wayward animals.

3M's Electrostatic Animal Guard resembles a tarantula. A dozen metal rods arch like bent legs around an insulator, forming an electrostatic barrier. Errant wildlife receives a mild shock if they get too close; the guard acts as an electrified fence.

"Electric co-ops can minimize outages without injuring animals. Guards can be installed easily without de-energizing the circuit," notes Jim Stanley, a product marketing manager in 3M's Electrical Markets Division.

Alternatives such as the Rauckman Wildlife Shield™ and ZAP-Shield™ create a barrier to keep teething squirrels, rodents, snakes,

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and other animals away from dangerous parts of electrical infrastructure. Frisbee-sized plastic or metal discs guard equipment in substations, too.

The guard your cooperative is using at this time is a Salisbury squirrel guard. It also creates a barrier to keep animals away and has proven to be effective. It fits right over the transformer insulator/wire.

Animal guards are not foolproof. But the measures help drive down the number of outages caused by animals. Another option is building habitats to help animals and power safely co-exist.

Osprey and other birds of prey don't use power lines as highways.

Instead, they're attracted to poles as perches. Raptors often nest on top of utility poles—a dangerous spot. An osprey's nearly five-foot wingspan can form a conduit between an energized power line and a neutral wire. Like squirrels, these birds may get hurt as high-voltage electricity looks for a path to the ground.

Some distribution cooperatives and/or generation and transmission cooperatives encourage birds to settle on man-made nest platforms. The utility removes a dormant nest from electrical equipment and places the nesting material on a nearby raised platform (as tall, or taller than the utility pole). When the birds return to the area, the U.S. Fish and

Wildlife Service claims odds are good they'll use the safer structure.

By giving raptors an alternative and much safer place to perch, the number of bird-related outages can be reduced.

Sources: NRECA, Tyco Electronics, U.S. Fish and Wildlife Service, Wood Quality Control

Megan McKoy-Noe writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association, the Arlington, Va.-based service arm of the nation's 900-plus consumer-owned, not-for-profit electric cooperatives. B. Denise Hawkins contributed to this story.

Youth to Washington tour

High school juniors with a passion for leadership and government are encouraged to apply for an all-expenses-paid trip to Washington D.C. in June! We want to encourage high school students to learn more about government and their role in it... and provide a select group of student leaders with a chance to get an up-close look at their government.

Monroe County Electric Co-Operative, Inc. will once again sponsor two junior students from each high school in its service area to attend Illinois Cooperative Youth Day in Springfield on April 2, 2014.

From that group, three students will be chosen to represent Monroe County Electric Co-Operative, Inc. by attending the Youth to Washington Tour, an all-expenses-paid trip to Washington D.C. from June 13 – 20, with other statewide winners.

The Electric Cooperative Youth Tour has been bringing

high school students to Washington D.C. for 55 years. On the tour, students will learn about electric cooperatives, American history and U.S. government, and walk away with a greater understanding of their role as an American citizen. They participate in National Youth Day, visit with their representatives and senators, and explore the sights around the nation's capital.

Monroe County Electric Co-Operative, Inc. works with area high school staff to select student leaders who are interested in government and the political process and would benefit from this program. If you are a junior in high school please contact your school guidance counselor for more details.



Co-op Connections Card Saving Members \$\$\$

Monroe County Electric Cooperative members saved over 50% on prescriptions in 2013 as of November, using the Co-op Connections card. There were a total of 134 prescriptions filled for a total savings of \$5,474 .



MCEC line outages - December 2013

Date	Duration	# Out	Location	Cause Desc	Sub
12/10/13	0:05	452	IL Rt 156	Maintenance	Waterloo
12/14/13	1:14	2	Stemler Rd	Small Animals or Birds	Millstadt
12/20/13	0:56	12	Gladel Dr	Other, Deterioration	Poe
12/26/13	4:07	82	Maey's Station	Vehicles or Machinery	Fults
12/29/13	0:18	46	Lake Ronnie	Vehicles or Machinery	Waterloo



Energy Efficiency *Tip of the Month*

Fighting winter chills? A crackling fire in the hearth warms the house, but don't let it heat up your electric bill. To cool energy costs, keep the fireplace damper closed when not in use. Caulk around the fireplace hearth. Double up on wood-earned warmth by lowering the thermostat setting to between 50 degrees and 55 degrees Fahrenheit. Learn more at www.energysaver.gov.

Source: U.S. Department of Energy

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New booklet available on “Energy Efficient Home Construction”

A new booklet is available now which replaces our old booklet on efficient home construction which was formerly called the “Certified Comfort Home” manual.

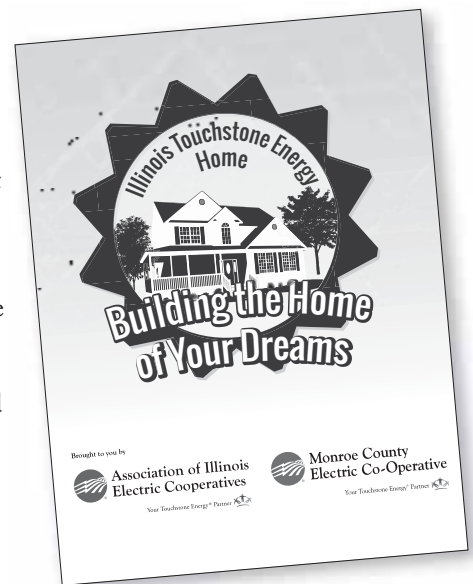
The new booklet has been updated with the new 2012 International Energy Conservation Code standards and is now called the Illinois Touchstone Energy Home “Building the Home of Your Dreams” booklet.

The booklets are available at our cooperative office and will be inserted in each new member home construction packet. They will also be available to any member who would like to stop by and pick one

up. Contact us by phone or email and we can send you one also.

Like the booklets we had been using, there are many illustrations on the new building techniques that come from the 2012 Energy Code. Any residential building is required to follow these new energy guidelines. Most of the requirements have been upgraded to higher energy efficiency standards. Ex: The attic insulation R-factor has been upgraded from R-38 to R-49.

Please contact us at 939-7171, 1-800-757-7433 or by email at amasterson@mcec.org if you would like a copy of this booklet.



H-E-A-T-E-R not best way to spell 'relief'

Winter is definitely here. Thanksgiving has been celebrated, we've scraped ice and snow off cars and your home may already be feeling the effects of winter. Have you also noticed some of the rooms in your home are cooler than others?

You may be tempted to use a space heater to warm up those colder rooms. But using a space heater to solve your “cold room” problem is a little like serving soup with a slotted spoon. You get a little of what you want, but most of it slips right through.

True, sitting in front of a space heater provides immediate relief. That heat washes over you like a tiny, electric-powered sun. Although it may warm you, it's not doing much to warm the room. That means you need to stay in the room to benefit, and you're using a lot of electricity to run the heater. A small space heater can eat up as much electricity as 20 standard 75-watt bulbs. Your whole-house heating system is much more efficient.

A space heater, which works a lot like a toaster oven by using resistance wire to generate heat, whether it is “Amish made” or a cheaper unit, is not a solution to a cold room. It'll do in a pinch, but the real answer is to seal your room. Most often, a room that's cooler than the rest of the house is one that lets the warm air your heating system creates slip right out of gaps and cracks around the foundation of your home, doors, windows or into the attic.

Before you plug in a space heater this year, see what you can do about finding and fixing the culprit behind your cold room. Seal the foundation of your home. Add weatherstripping to doors. Caulk around windows. Use thermal curtains.



PHOTO COURTESY OF NRECA

Trying to solve the problem of a cold room? A space heater may offer immediate relief, but could cost you in higher energy bills. A better solution is to fix the cause of the room's coldness.

If you need more information on your electric usage, contact Monroe County Electric Co-Operative, Inc. at 939-7171 or 1-800-757-7433.