

Electricity

Squirreling away power

By Kate Whittle, 7 January 2016, Montana, US

The next time the electricity goes out in Missoula, a rodent could be the reason. Squirrels caused 560 power outages in Montana in 2015, according to Butch Larcombe with NorthWestern Energy. Animal-related incidents are the third leading cause of outages in the state, after system malfunctions and adverse weather.

"They're industrious little creatures," Larcombe says of squirrels. "And so they like to climb up power poles and get on lines, and it's not getting on just one line that



gets them in trouble, it's where they get connected up with another line or piece of equipment, that's where we have problems."

Nationwide, squirrels and birds are some of the most common causes of power outages, according to the American Public Power Association. The APPA's "Squirrel Index" indicates the small rodents are an ongoing threat to the U.S. electrical grid, and squirrel-related outages are most likely to happen in summer months. A statement by APPA Director of Energy and Environmental Services Alex Hofmann advises utilities to "remain vigilant and remember—they always squirrel their way back."

In 2015, total Montana outages cost NorthWestern Energy more than \$11 million, Larcome says. He adds that NorthWestern invests about \$60 million annually on preventative measures, like trimming trees and upgrading equipment.

At the Missoula Electric Cooperative, member service manager Dan Rogers attributes about 10 percent of their outages to animals. MEC is in the process of installing plastic guards over unprotected electrical connections on its poles.

"The plastic protectors keep the animals from contacting energized parts," Rogers says, "thus reducing the occurrence of these nuisance outages on our system, as well as providing protection for small animals and birds."

Larcombe notes that squirrels aren't the only critter of concern. On Sept. 16, thousands lost power after a beaver dropped a tree on a transmission line in Missoula. It damaged a substation, cutting electricity to communities as far away as Thompson Falls. The outage briefly halted an Osprey game, and TV news stations dubbed it the "Beaver Incident." Larcombe says it's the kind of challenge inherent to rural areas.

"Montana's a mostly rural, far flung state," he says, "and due to that nature of the state, and the nature of the system that serves it, the potential for all sorts of wild and woolly things to happen is pretty high."