

Reliable Power and the Right of Way



Above, a tall tree from far outside CVEA's right of way in the Copper Basin fell into the power line
Opposite left, multiple trees from outside CVEA's right of way were forced into power lines by heavy, wet snow during a severe weather storm in the Copper Basin
Opposite right, a tree on the power line due to heavy wind caused a widespread outage

In a perfect world, the lights would turn on every time you flip the switch and would stay on until you flipped the switch to turn them off. While many of us living in the Copper Basin and Valdez believe this is the perfect place to live, the reality is there are many obstacles that keep the lights from staying on.

Believe it or not, the weather in our paradise is not conducive to reliable transmission and distribution of electricity. We have 30 plus feet of snow that falls annually in the Valdez area and at times weeks upon weeks of -40 degree and below cold snaps in the Copper Basin. We get hurricane force winds, blowing snow, rime ice build up, and snow and ice packed roads, not to mention an avalanche now and again.

In this very real world, there are 50 foot, 60 foot and even taller, trees that aren't content on standing tall forever. Trees and branches that come into contact with power lines can cause outages and system disturbances, especially due to snow, wet weather, or severe wind conditions.

One question we hear a lot is, "What are you doing to prevent outages?" The quick answer is simple, everything we can.

CVEA strives to improve electric reliability to members. In addition to system improvements, inspections, and replacing aging materials and equipment, vegetation management is

another way to enhance reliability.

Tree and brush clearing can help reduce the number and length of outages, so CVEA monitors growth that may create potential problems. It is an ongoing challenge; however, as CVEA owns and maintains over 500 miles of distribution and 105 miles of transmission lines which require ongoing vegetation clearing within the rights of way.

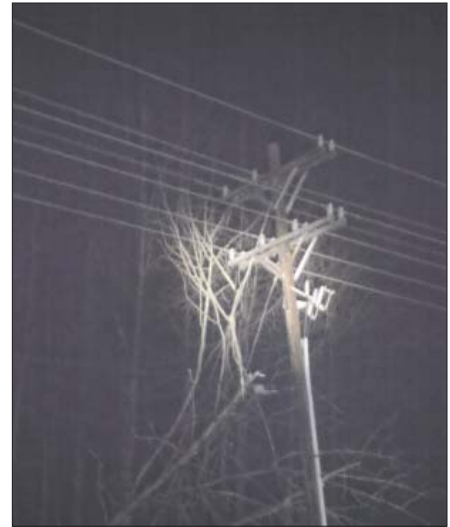
What is a right of way?

A right of way (ROW) is the use of private or government owned property covered by an agreement that allows utilities to construct and maintain their facilities in order to ensure reliability. Cooperative power lines are constructed within the ROWs. CVEA does not own the land used for a power line ROW; it is granted to CVEA by the co-op's member-owners or other property owners.

Use of the power line ROW is restricted to use by the utility for electrical thoroughfare only. In many cases the established ROW is CVEA's only access to the utilities in that area.

CVEA needs access on the ROW for the following reasons:

- Reclear brush and trees that could contact power lines
- Add or replace transformers and other equipment when a



- new customer connects
- Make emergency repairs
- Maintain existing lines and structures

Each year CVEA clears and maintains portions of our dedicated ROW. Typical ROWs for CVEA are maintained at 100 feet for transmission lines, 20-30 feet for overhead distribution lines, and 10 feet for underground.

Still, at the widest granted ROW, it would only take a 40 foot tree at the edge of the ROW to fall into the line and potentially cause an outage. There are many trees within CVEA's service territory that reach far higher than 40 feet. Even a 50 foot tree can easily come into contact with CVEA power lines from outside of the existing ROW. You may have seen the cottonwoods in Valdez that dwarf the lines or the spruce trees around ten-mile or in the Basin that are at least twice as tall as the poles.

Although these trees could cause a future problem, CVEA does not have the legal right to cut them down. Due to private, state, and federal property limitations, we can only maintain what is in the permitted route or what is dictated on an easement.

Over the next several years the ROW along the southern section of the transmission line, between Valdez and Pump Station 12, will be cleared to the original 100 foot wide clearance.

This 40-plus mile section of line is in some of the most rugged and hard to access areas on the CVEA system and requires the use of mechanical and hand clearing methods. Over 12 miles were cleared in 2017. Once the ROWs are re-established, ongoing maintenance will be much more efficient.

In addition to the ROW clearing on the transmission system, CVEA must also maintain the ROW on the distribution lines which serve residential and commercial members.

During the construction season in 2017, CVEA cleared a substantial amount of vegetation under the overhead distribution systems in the Copper Basin and underground in Valdez.

CVEA will continue this effort in the upcoming years. The focus will be the main lines that serve the largest number of

members first, those typically seen along the highways, followed in subsequent years on the lines that feed smaller areas, such as those in subdivisions and down side roads.

Even if it has been an number of years since the ROW was cleared in your area, CVEA will be clearing that area again soon.

Although it may not be as apparent, CVEA also must maintain the ROW where utilities are buried underground. This is often overlooked due to the lack of visible poles and wires. The maintenance of underground ROWs is equally as important and will be prioritized going forward.

As members of the Cooperative, you can do your part. Please remember that it is the responsibility of the property owner to keep equipment, fences, buildings, vehicles and debris off the ROW. This is important for allowing equipment used for clearing the vegetation on the ROW, but equally as important for allowing CVEA the access to utilities with vehicles and equipment when repairs, maintenance, and inspections need to be performed.

In addition, as mentioned above, a large percentage of outages are caused by tall trees that are outside of the CVEA ROW, that the co-op does not have the legal right to cut down unless they present a danger. **If you see a 'trouble tree', one that is in danger of falling into the power lines, please contact CVEA at 822-3211 in the Copper Basin or 835-4301 in Valdez. Do not attempt to remedy this on your own as any contact with an energized line could cause serious injury or death.**

When you see CVEA or its contractors on the ROW clearing the vegetation, remember this is just one of many ways your co-op is working to deliver safe, reliable, cost-effective electric service.

For additional information on ROW clearing or guidelines, please contact Sharon Crisp, CVEA Director of Communications, at 822-5506, 835-7005, or email crisp@cvea.org. ■