

# Will you hear the transmission line?

Audible noise from a transmission line is generally not an issue during fair weather. With rainy conditions there may be some audible noise, but even during heavy rainfall (one inch per hour), **noise generated from the line will typically be lower than the normal sound level in a library.** On a windy day, you might hear the sound of wind blowing through the wires.

## Are Noise Levels Controlled?

Alberta's electric system is regulated by the Alberta Utilities Commission (AUC). **ATCO Electric must meet noise limits set by the AUC's Rule 012 - Noise Control.** These limits must be met when measured at night, during fair weather conditions, at the nearest home. If there are no homes nearby, the noise limit cannot be exceeded when measured at a distance of 1,500 metres from the transmission facility. In a rural setting, the limit is typically 40 decibels, which is only slightly higher than the typical background level you would expect to find in a rural area.

## Corona and Sound from the Line

Electric fields around a transmission line conductor wire can become concentrated enough to create an electric discharge. This type of discharge is called a corona and it ionizes the air around the conductor wire. Conductor voltage, shape and diameter as well as scratches, dust and water on the wire can affect the creation of coronas. **When a corona forms, there can be audible noise coming from the transmission line.** A crackling or humming sound is generated by small electrical discharges, often caused by water drops that collect on the conductor when it rains or when there is sufficient moisture in the air. Because corona can contribute to energy losses, many transmission lines are designed so that, normally, they do not produce corona.

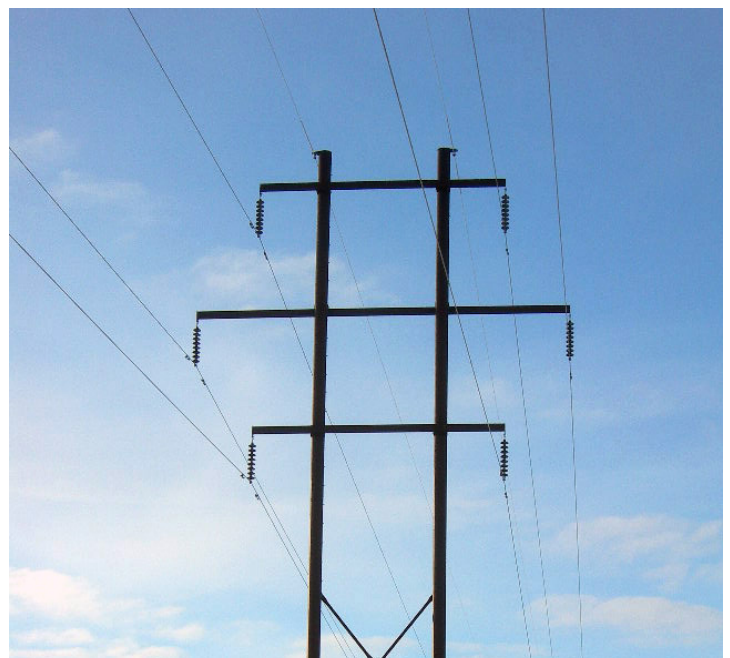
## Does Noise Affect Wildlife?

Based on research and observation, it is unlikely that noise from transmission lines results in any significant effects to wild or domestic animals.

Many bird species perch, roost, and nest near or on the lines and towers and appear to be unaffected by transmission line noise. Research undertaken in the United States, found that transmission line noise did not deter elk, deer and several other species from crossing or foraging on cleared right-of-ways. Other studies showed no conclusive reactions to transmission line noise among bear, jackrabbits, deer, coyotes, and elk<sup>1</sup>.

Noise and the presence of people during construction of a transmission line may cause animals to temporarily avoid the construction area. This could result in a temporary decrease in the number of animals in an area near the transmission line during construction.

<sup>1</sup> Fur, Feathers & Transmission Lines. How rights of way affect wildlife (Manitoba Hydro)



## CONTACT INFORMATION

If you have any questions, or require more information, please contact us.

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### Questions and Answers

- Q:** Does the Alberta Utility Commission's (AUC) Rule 012 - Noise Control regulate noise from facilities other than transmission lines?
- A:** Yes. The AUC's Rule 012 - Noise Control regulates noise from Alberta electric system facilities. This includes transmission lines, substations, power plants and other facilities.
- Q:** How can I view a copy of the AUC's Rule 012 - Noise Control?
- A:** A copy of the AUC's Rule 012 - Noise Control can be viewed on the AUC website at [www.auc.ab.ca/acts-regulations-and-auc-rules/rules/Documents/Rule012.pdf](http://www.auc.ab.ca/acts-regulations-and-auc-rules/rules/Documents/Rule012.pdf)

You can also contact the AUC by telephone at 780.427.4903 or by email at [consumer-relations@auc.ab.ca](mailto:consumer-relations@auc.ab.ca)