

## Existing infrastructure near transmission facilities

Throughout a project we work to ensure that existing infrastructure near or adjacent to our transmission facilities is managed safely and risks are properly mitigated.

When identifying transmission line route and substation site options, AltaLink takes several factors into consideration in an effort to find locations with low overall impacts. Some of the factors we take into consideration include the agricultural and environmental features, the residential density and technical requirements. We also look at existing infrastructure in the project area. Existing infrastructure may include:

- pipelines
- buildings and fences
- railways
- telecommunications facilities

We understand there are concerns about **induction** or interference with existing infrastructure cause by our facilities. During the ongoing operation of our facilities, AltaLink ensures that any induction remains below applicable safety guidelines.

### Pipelines

The Government of Alberta Pipelines Act and the Electrical Coordination Standard (from the Canadian Standards Association) provide direction to electrical facility owners, such as AltaLink, to ensure the voltages and currents induced by transmission facilities onto nearby pipelines meet industry standards.

When a proposed transmission line route is adjacent to or crosses an existing pipeline, AltaLink will provide engineering data to the pipeline owner so that induction studies can be completed. We will pay reasonable costs for induction studies and mitigation measures. The induction studies are completed by the pipeline facility owner's chosen expert who will design a series of protection measures to ensure that our transmission facilities are safely interacting with the pipeline.

Possible protection measures may include expanding the working area or fence line around any potentially charged objects like a valve, or grounding any objects located near the pipeline that may potentially carry a charge, like a fence or gate.

#### DEFINITION:

#### **Induction**

Refers to the build-up of electrical charges in an object near an electrical facility.

## Buildings and fences

During construction of new transmission facilities, AltaLink will, if required, ground metal buildings, fences, (including electric fences) and other structures close to our facilities to avoid the build-up of an electrical charge and possible [nuisance shocks](#). Please contact us if you have concerns or questions about buildings or fences that may need to be grounded.

## Railways

Railway companies require that a new transmission line be placed in a separate right-of-way adjacent to the railway right-of-way. This means a new transmission line paralleling a railway could be located about 15 metres (approximately 50 feet) onto private land. AltaLink works with railway companies to determine if and how they can accommodate our line operating next to their railway line, or if there are plans to retire the railway line.

## Telecommunications facilities

Telecommunications equipment is a vital part of AltaLink's business. We rely on telecommunications equipment to transmit data to our system control centre. This allows us to safely and reliably monitor and operate the electric system.

A licensed [telecommunications tower](#) will not impact any other licensed telecommunication frequencies such as cellular, over-the-air television, digital television, wireless internet, satellite television, radio or GPS.

Existing telecommunications facilities may be impacted by new transmission lines. The type of telecommunications facilities (e.g., radio or television) determines the potential setback or mitigation plans. When an ideal setback cannot be maintained, AltaLink works with the telecommunications facility owners to determine an appropriate mitigation. This might involve modifying our structure design. For example, a transmission structure might potentially affect an AM radio tower's ability to transmit radio waves, so we would modify the structure design by changing the height or type of materials used to help mitigate any impacts.

[If you have questions about telecommunications, please contact us.](#)

DEFINITION:

### **Nuisance shock**

Is similar to the static shock you might receive when you slide your feet across a carpet and then touch someone.

### **Telecommunication towers**

Use Radio Frequency (RF) signals to transmit and receive information. The point-to-point signals travel along a focused path at low power levels and are well below recommended safety limits.

The logo for AltaLink, featuring the word "ALTA LINK" in a bold, blue, sans-serif font. The letters "A", "L", "I", "N", and "K" have a stylized, multi-lined appearance, suggesting power or energy.

CONTACT US

1-877-267-5973  
[www.altalink.ca](http://www.altalink.ca)