

## Electric system improvements near you

Grist Lake Substation 190S and Transmission Line



AltaLink's transmission system efficiently delivers electricity to 85% of Albertans. Dedicated to meeting the growing need for electricity, AltaLink connects Albertans to renewable, reliable and low-cost power. With a commitment to community and environment, AltaLink is ensuring the transmission system will support Albertans' quality of life for years to come. Learn more at [www.altalink.ca](http://www.altalink.ca).

You are receiving this newsletter because you are near the Grist Lake Substation and **Transmission** Line project proposed to be located approximately 30 kilometres (20 miles) southeast of Conklin and we want your input.

FortisAlberta, the power distributor in the area, has requested this transmission system reinforcement to connect Devon NEC Corporation's (Devon) proposed facility to Alberta's electric system.

You may have previously received information from Devon about its proposed facility in the area. Please contact Devon directly for more information about this facility. Their contact information is on the back page of this newsletter.

We want to provide you with:

- project details
- information about how you can provide your input
- a project schedule
- a map of the potential transmission line routes and substation location

**Definition: Transmission**

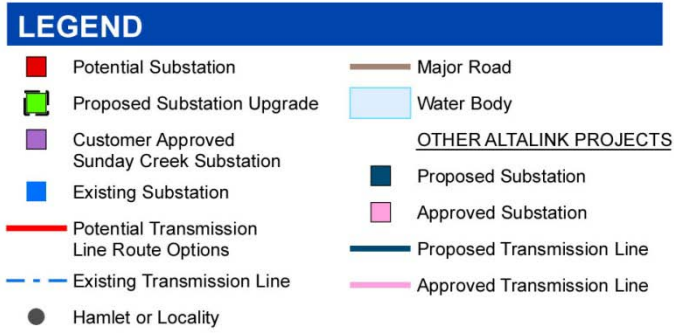
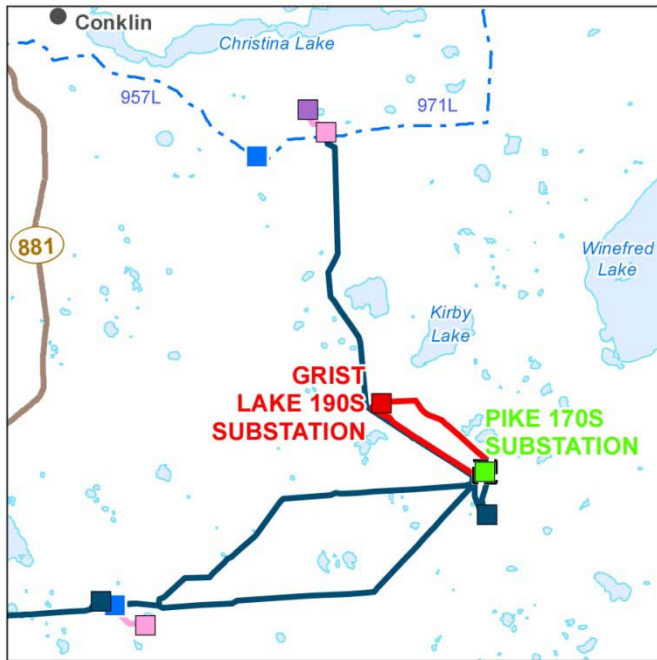
Transmission lines make up Alberta's electric highway, linking the places where power is generated to where power is used. Transmission lines transport large amounts of power over long distances across the province. The transmission system connects diverse sources of power generation including wind, high-efficiency coal, natural gas and more.

### CONTACT US

1-877-380-0303

[stakeholderrelations@altalink.ca](mailto:stakeholderrelations@altalink.ca)

[www.altalink.ca/regionalprojects](http://www.altalink.ca/regionalprojects)



## Project details

Devon is proposing to build a Steam Assisted Gravity Drainage (SAGD) facility in the area. Transmission system reinforcements are required to ensure that Devon’s proposed facility is connected to the electric system and has access to the power it requires to operate.

The Alberta Electric System Operator (AESO) received an application from FortisAlberta to connect Devon’s facility to the electric system. The AESO will file a Needs Application with the Alberta Utilities Commission (AUC).

The Grist Lake Substation and Transmission Line project includes:

- a new substation (to be called Grist Lake 190S)
- modifications to the proposed Pike Substation (called 170S)
- approximately seven kilometres (four miles) of new transmission line to connect the proposed Grist Lake Substation to the proposed Pike Substation



*The proposed Grist Lake Substation will look similar to the one pictured here.*

## New Grist Lake Substation

Substations are the connection point between high-voltage transmission lines and the lower voltage power lines (called distribution lines) that connect directly to homes, businesses and industrial facilities.

We are proposing the Grist Lake Substation to be located approximately 30 kilometres (20 miles) southeast of Conklin at NW 26-74-6-W4.

The substation will be located in a fenced area approximately 70 x 90 metres (230 x 295 feet) on a site approximately 80 x 100 metres (263 x 328 feet).

Please see the map included with this package to view the potential substation location.

## Modifications to the Pike Substation

The Pike Substation is proposed as part of AltaLink’s Christina Lake Area Transmission Development, a transmission system reinforcement that will meet the increased demand for electricity in the Christina Lake area. If you are near the Pike Substation, you will have received information about the Christina Lake Area Transmission Development.

To accommodate the Grist Lake Substation and Transmission Line project, we are also planning to upgrade the proposed Pike Substation by adding three new circuit breakers. Circuit breakers are electrical switches inside a substation that protect substation equipment. Circuit breakers help ensure the safety and reliability of the electric system.

The Pike Substation upgrades will be completed within the proposed 250 x 300 metre (820 x 985 feet) substation site on land that AltaLink will lease.

## New transmission line

We are proposing to build approximately seven kilometres (four miles) of new 138 kV (kilovolt) double circuit transmission line, to be called 476L/477L, to connect the proposed Grist Lake Substation to the proposed Pike Substation.

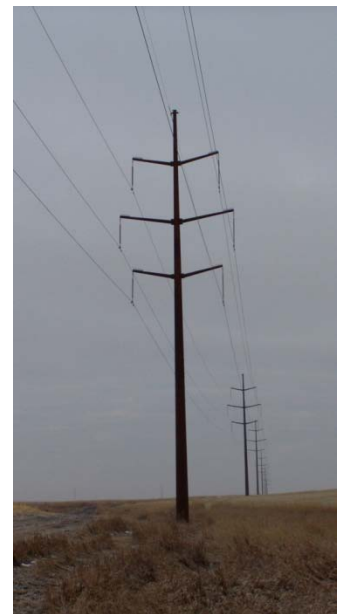
We have identified two potential route options for the transmission line and would like your input.

Both of the route options parallel existing linear developments to reduce environmental impacts in the area. Please see the map included in this package to view the route options. If the project is approved, only one transmission line will be built.

The transmission line structures will be single-pole and may be comprised of steel, wood or laminate material. The final design will be determined after further engineering.

The structures will typically:

- be approximately 19-24 metres (62-79 feet) tall
- have a distance between structures of approximately 140 metres (460 feet)
- have a right-of-way of approximately 20 metres (66 feet)



*The proposed new transmission structures will look similar to the single-pole structure pictured here.*

## Route selection

When identifying route options, AltaLink takes several factors into consideration in an effort to find routes with a low overall impact. Some of the factors we take into consideration include:

- agricultural
- residential
- environmental
- electrical
- cost
- visual
- special considerations

Please let us know what other factors are important to you so we can consider them when refining route options.

## Electric and Magnetic Fields (EMF)

AltaLink recognizes that people have concerns about exposure to Electric and Magnetic Fields (EMF) and we take those concerns very seriously. Everyone in our society is exposed to EMF from many sources, including:

- power lines and other electrical facilities
- electrical appliances in your home
- building wiring
- the earth's natural magnetic field

National and international organizations such as the World Health Organization and Health Canada have been conducting and reviewing research about EMF for more than 40 years. Based on this research, these organizations have not recommended the general public take steps to limit their everyday exposure to EMF from high voltage transmission lines. If you have any questions about EMF please contact us.

Website: [www.altalink.ca/emf](http://www.altalink.ca/emf)

Email: [emfdialogue@altalink.ca](mailto:emfdialogue@altalink.ca)

Toll-free phone number: 1 -866-451-7817

## Providing your input

We will contact all occupants, residents and landowners who are on or directly adjacent to the potential substation site and transmission line routes to gather input through one-on-one consultations.

After the consultation process is complete we will file an application with the Alberta Utilities Commission (AUC). The AUC ensures the fair and responsible delivery of Alberta's utility services. The AUC will review the application through a process in which stakeholders can participate. We will notify stakeholders when we file the application and again once the AUC has reached a decision about the project. To learn more about the AUC process and how you can become involved, please refer to the brochure included in this package titled *Public Involvement in Needs or Facilities Applications*.

## Anticipated project schedule

Notify and consult with stakeholders	February-July 2013
File application with Alberta Utilities Commission (AUC)	August 2013
Start construction if project is approved	July 2014
Complete construction	June 2015

*Although we attempt to follow the anticipated project schedule it is subject to change. We will continue to provide you with updated schedule information if required as the project progresses.*

## Contact us

To learn more about the proposed project, please contact:

**AltaLink** at 1-877-380-0303 (toll free)

Email: [stakeholderrelations@altalink.ca](mailto:stakeholderrelations@altalink.ca)

Website: [www.altalink.ca/regionalprojects](http://www.altalink.ca/regionalprojects)

To learn more about Devon’s proposed facility, please contact:

**Devon NEC Corporation**

Kerry Van Son – Manager, Reservoir Engineering

[Kerry.vanson@dvn.com](mailto:Kerry.vanson@dvn.com)

403-663-2687

To learn more about Alberta’s electric system and the need for the project, please contact:

**Alberta Electric System Operator (AESO)** at 1-888-866-2959

Email: [stakeholder.relations@aeso.ca](mailto:stakeholder.relations@aeso.ca)

*The Alberta Electric System Operator (AESO) is an independent, not-for-profit organization responsible for the safe, reliable and economic planning and operation of the provincial transmission grid. For more information about why this project is needed, please refer to the AESO’s Need Overview included with this package, or visit [www.aeso.ca](http://www.aeso.ca). If you have any questions or concerns about the need for this project you may contact the AESO directly.*

To learn more about the application and review process, please contact:

**Alberta Utilities Commission (AUC)** at 780-427-4903

(You can call toll-free by dialing 310-0000 before the number.)

Email: [consumer-relations@auc.ab.ca](mailto:consumer-relations@auc.ab.ca)

## Included in this information package:

- Project maps
- AUC brochure: *Public Involvement in Needs or Facilities Applications*
- AESO Need Overview

## DID YOU KNOW?

According to the Canadian Electricity Association, Canada’s electricity grid was built for a population of about 20 million, but is today servicing around 35 million people. Provinces across Canada, including Alberta, are working to reinforce their aging electric systems so they can continue to provide customers with reliable power.