



Benbow 397S Substation Upgrade

Needs Identification Document

1.0 Participant Involvement Program (PIP)

From June to December 2015, the AESO conducted a Participant Involvement Program (PIP) to assist in preparing its Benbow 397S Substation Upgrade Needs Identification Document (NID). The AESO directed transmission facility owner (TFO), AltaLink Management Ltd. (AltaLink), to assist the AESO in providing notification in accordance with NID14 and Appendix A2 of Alberta Utilities Commission Rule 007.

1.1 Stakeholder Notification

The AESO's PIP was designed to notify and provide information to all occupants, residents and landowners within the notification area of the proposed development, as well as to other interested parties, including the following government bodies, agencies and other stakeholder groups (Stakeholders):

- Alberta Environment and Parks, Regional Resource Management, Upper Athabasca Region
- Alberta Environment and Parks, Land Management, Upper Athabasca Region
- Alberta Environment and Parks, Regional Integrated Approvals, Peace River Region
- Alberta Transportation, Central Region
- Woodlands County
- Alliance Pipeline Ltd.
- ANC Timber Ltd.
- Canadian Natural Resources Limited
- FortisAlberta Inc.
- Nova Gas Transmission Ltd.
- Pembina Pipeline Corporation
- RMP Energy
- Seitel Canada Ltd.
- SemCAMS ULC
- TELUS Communications Company
- Trilogy Resources Ltd.

The AESO used a variety of methods to notify Stakeholders on the need for Benbow 397S Substation Upgrade. The AESO developed a one-page Need Overview document



that described the need for the proposed transmission development. A copy of this document was posted to the AESO website at http://www.aeso.ca/transmission/32249.html on July 13, 2015 and a notice was published in the AESO Stakeholder Newsletter on July 14, 2015. Copies of the Need Overview posting and the AESO Stakeholder Newsletter notice have been included as Attachments 1 and 2, respectively.

The Need Overview was also included with AltaLink's project-specific information package mailed on June 30, 2015 to the Stakeholders noted above. Attachment 3 includes a copy of AltaLinks' information brochure.

To ensure that Stakeholders had the opportunity to provide feedback, the AESO also provided Stakeholders with a dedicated, toll-free telephone line (1-888-866-2959) and a dedicated email address (stakeholder.relations@aeso.ca). AESO contact information, along with the AESO's mailing address (2500, 330 5th Ave. SW, Calgary) and website address (sww.aeso.ca), and a privacy statement that described how the AESO is committed to protecting Stakeholders' privacy, were included on the Need Overview related to this application.

As directed by the AESO, the TFO was prepared to direct any inquiries or concerns about the project need to the AESO. The TFO has indicated that Stakeholders have not identified any concerns or objections with the need for the proposed transmission development.

1.2 Public Notification

Most recently, the AESO published a Public Notification of Filing to the AESO website at http://www.aeso.ca/transmission/32249.html and a notice in the AESO Stakeholder Newsletter on November 17, 2015. Copies of the Public Notification of Filing posting and the AESO Stakeholder Newsletter notice have been included as Attachments 4 and 5, respectively.

1.3 Concerns and Objections Raised

The AESO has not received any indication of concerns or objections from any party about the need for the proposed transmission development.

1.4 List of Attachments

- Attachment 1 AESO Need Overview
- Attachment 2 AESO Stakeholder Newsletter Need Overview Notice
- Attachment 3 AltaLink's Information Brochure Benbow 397S Substation Transformer Upgrade (June 2015)



- Attachment 4 AESO Public Notification of Regulatory Filing (AESO Website Posting)
- Attachment 5 AESO Stakeholder Newsletter NID Filing Notice



Attachment 1 - AESO Need Overview

Need for the Benbow 397S Substation Upgrade in the Fox Creek area



Transmission Development Information for Stakeholders

FortisAlberta Inc. (FortisAlberta) has applied to the Alberta Electric System Operator (AESO) for transmission system access to reliably meet electricity demand in the Fox Creek area. FortisAlberta's request can be met by upgrading the existing Benbow 397S substation including replacing the existing 138/24.94 kV transformer with a higher-capacity 138/25 kV transformer and adding the associated equipment.

The AESO is processing FortisAlberta's request, including providing information to landowners, occupants, residents and agencies that may be near the proposed transmission development. The AESO intends to apply to the Alberta Utilities Commission (AUC) for approval of this need in late 2015 or early 2016. The AESO's needs identification document (NID) application will be available on the AESO's website at www.aeso.ca/nid at the time of its application to the AUC.

Who is the AESO?

Alberta's transmission system, sometimes referred to as the Alberta Interconnected Electric System (AIES), is planned and operated by the AESO. The transmission system comprises the high-voltage lines, towers and equipment (generally 69 kV and above) that transmit electricity from generators to lower voltage systems that distribute electricity to cities, towns, rural areas and large industrial customers.

The AESO's role is to maintain safe, reliable and economic operation of the AIES. The AESO's planning responsibility includes determining the need for transmission system development and the manner in which that need is met. The AESO is also mandated to facilitate the interconnection of qualified market participants to the AIES. The AESO is regulated by the AUC and must apply to the AUC for approval of its NID application.

How is AltaLink Management Ltd. (AltaLink) involved?

AltaLink is the transmission facilities owner (TFO) in the Fox Creek area. While the AESO is responsible for identifying that transmission system development is needed, AltaLink is responsible for detailed siting and routing, constructing, operating and maintaining the associated transmission facilities. The AESO has directed AltaLink to provide information to stakeholders on this need and to file a facility proposal application with the AUC which will include a detailed description and location of the proposed transmission development.

Further Information

The AESO appreciates your views on the need for transmission system development and your comments are encouraged. If you have any questions or comments regarding the need for the proposed transmission system development in the Fox Creek area or the AESO's application regarding this need, please contact:

Susan Haider
AESO Stakeholder Relations
1-888-866-2959
stakeholder.relations@aeso.ca
2500, 330 – 5th Avenue SW
Calgary, Alberta T2P 0L4

The AESO is committed to protecting your privacy. Your feedback, comments and/or contact information collected by the AESO will be used to respond to your inquiries and/or to provide you with further information about the project. The AESO will not use your personal information for any other purposes and will not disclose your information without consent or a legal obligation. If you choose to communicate by email, please note, email is not a secure form of communication. Security of your communication while in transit cannot be guaranteed.

1638 July 2015



Attachment 2 – AESO Stakeholder Newsletter Need Overview Notice

Benbow 397S Substation Upgrade – Need for Transmission System Development in the Fox Creek area

FortisAlberta Inc. has applied to the AESO for transmission system access to reliably meet electricity demand in the Fox Creek area. FortisAlberta's request can be met by upgrading the existing Benbow 397S substation which includes replacing the existing 138/24.94 kV transformer with a higher-capacity 138/25 kV transformer and adding the associated equipment.

The AESO has posted a Need Overview for this project on its website. Please <u>click here</u> to view the document or visit the AESO website at <u>www.aeso.ca</u> and follow the path Transmission > Needs Identification Documents > Benbow 397S Substation Upgrade.



Attachment 3 – AltaLink's Information Brochure – *Benbow 397S Substation Transformer Upgrade* (June 2015)



You are receiving this newsletter because you are near the Benbow 397S Substation Transformer Upgrade Project and we want your input.

Alberta has grown significantly in recent years and the demand for electricity has increased. AltaLink is proposing to upgrade its existing Benbow **Substation** to ensure a reliable supply of electricity.

We are providing you with:

- project details
- maps of the proposed project sites
- information about how you can provide your input
- the project schedule

DEFINITION:

Substation

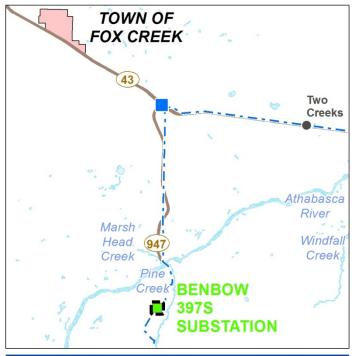
Substations are the connection points between power lines of varying voltages and contain equipment that controls and protects the flow of power.
Substations include transformers that step down and step up the voltage so power can be transmitted through transmission lines or distributed to your community through distribution lines.

to come. Learn more at www.altalink.ca.

CONTACT US

1-877-267-1453 stakeholderrelations@altalink.ca www.altalink.ca/regionalprojects





LEGEND Potential Upgrade to Existing Substation — Road Existing Substation Urban Area --- Existing Transmission Line Water Body Hamlet or Locality



The existing Benbow Substation

Project details

FortisAlberta has requested upgrades to the electric system to help support the power demands of the customers in the area.

The proposed project includes replacing equipment in the Benbow Substation, located approximately 34 kilometres (21 miles) southeast of the town of Fox Creek in Woodlands County (within NE 15-59-18 W5M). All of the work will take place within the existing AltaLink substation lease boundary and no new land will be required. However, temporary workspace may be required during construction.

We may also use a mobile substation during the construction process to ensure electrical service and reliability is maintained.

We are proposing to replace the existing voltage regulator and transformer with a new higher capacity transformer.

Transformers step down the voltage in a substation so power can be distributed safely through distribution lines.

Transformers also step up the voltage so power can be transmitted through transmission lines.

These upgrades to the electric system will help to ensure that industrial customers continue to have a reliable supply of power.



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

National and international organizations such as Health Canada and the World Health Organization 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 Email: emfdialogue@altalink.ca

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

Providing your input

We will contact landowners, residents and occupants near the proposed substation upgrade project to gather input and address questions or concerns.

After the consultation process is complete we will file an application with the Alberta Utilities Commission (AUC). 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	June-July 2015
File application with Alberta Utilities Commission (AUC)	October 2015
Start construction if project is approved	February 2016
Construction completed	September 2016

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

1-877-267-1453 (toll free)

E-mail: stakeholderrelations@altalink.ca Website: www.altalink.ca/regionalprojects

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

ALBERTA ELECTRIC SYSTEM OPERATOR (AESO)

1-888-866-2959

E-mail: 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. If you have any questions or concerns about the need for this project you may contact the AESO directly or you can make your concerns known to an AltaLink representative who will communicate them to the AESO on your behalf.

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

ALBERTA ULTILITIES COMMISSION (AUC)

780-427-4903 (toll-free by dialing 310-0000 before the number.)

E-mail: consumer-relations@auc.ab.ca

PRIVACY COMMITMENT

AltaLink is committed to protecting your privacy. Collected personal information will be protected under AltaLink's Privacy Policy and the Freedom of Information and Protection of Privacy Act. As part of the regulatory process for new transmission projects, AltaLink may provide your personal information to Alberta Utilities Commission (AUC). For more information about how AltaLink protects your personal information, visit our website at www.altalink.ca/privacy or contact us directly via e-mail privacy@altalink.ca or phone at 1-877-267-6760.

INCLUDED IN THIS INFORMATION

PACKAGE:

- Project map
- AUC brochure: Public Involvement in Needs or Facilities Applications
- AESO Need Overview
 Document

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.



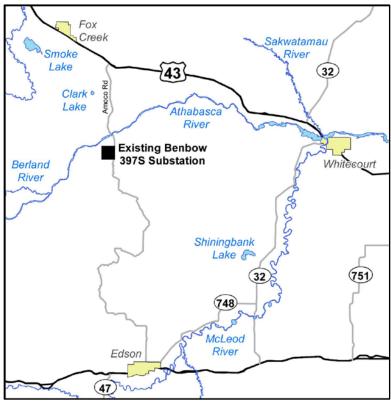
Attachment 4 – AESO Public Notification of Regulatory Filing (AESO Website Posting)

AESO Public Notification of NID Filing

Addressing the Need for the Benbow 397S Substation Upgrade in the Fox Creek Area

The Alberta Electric System Operator (AESO) advises you that it intends to file a Needs Identification Document (NID) for the Benbow 397S Substation Upgrade with the Alberta Utilities Commission (AUC) on or after December 2, 2015.

FortisAlberta Inc. (FortisAlberta) has applied to the AESO for transmission system access to reliably meet electricity demand in the Fox Creek area. FortisAlberta's request can be met by upgrading the existing Benbow 397S substation including replacing the existing 138/24.94 kV transformer with a higher-capacity 138/25 kV transformer and adding the associated equipment.



The black square on the map indicates the approximate location of the Benbow 397S substation which is at NE 15-59-18 W5M. In a separate application called a Facility Application, AltaLink Management Ltd. (AltaLink) the transmission facility owner (TFO) in the Fox Creek area, will describe the specific upgrades to be performed and request AUC approval to construct and operate the specific transmission facility.

The AESO and AltaLink presented this need to stakeholders, including residents, occupants and landowners, from June 2015 to November 2015. The AESO has considered feedback gathered from stakeholders, and technical and cost considerations, and will apply to the AUC for approval of the need for this transmission development. Once it is filed, the NID will be posted on the AESO website at http://www.aeso.ca/transmission/32249.html

Please visit our website, www.aeso.ca for more information, or contact the AESO at 1-888-866-2959 or stakeholder.relations@aeso.ca



Attachment 5 – AESO Stakeholder Newsletter NID Filing Notice

Benbow 397S Substation Upgrade - Notice of NID Filing

FortisAlberta Inc. has applied to the AESO for transmission system access to reliably meet electricity demand in the Fox Creek area. FortisAlberta's request can be met by upgrading the existing Benbow 397S substation including replacing the existing 138/24.94 kV transformer with a higher-capacity 138/25 kV transformer and adding the associated equipment.

The AESO intends to file the Benbow 397S Substation Upgrade Needs Identification Document (NID) application with the Alberta Utilities Commission (AUC)on or after December 2, 2015, requesting that the AUC approve this NID.

The AESO has posted the public notification for its NID filing on its website for the Benbow 397S Substation Upgrade. Please <u>click here</u> to view the document or visit the AESO website at <u>www.aeso.ca</u> and follow the path Transmission > Needs Identification Documents > Benbow 397S Substation Upgrade to see all the relevant documents, including the NID application once it is filed with the Commission.