



Wainwright 51S Substation Connection Enhancement

Needs Identification Document

1.0 Participant Involvement Program (PIP)

From October 2015 to July 2016 the AESO conducted a Participant Involvement Program (PIP) to assist in preparing its *Wainwright 51S Substation Connection Enhancement Needs Identification Document* (NID). The AESO directed the transmission facility owner (TFO), AltaLink Management Ltd. (AltaLink), in its capacity as general partner of AltaLink, L.P., to assist the AESO in providing notification in as part of the AESO's PIP. The AESO's PIP has been conducted in accordance with the requirements of Section 6.2.1, NID19, and Appendix A2 of the current Alberta Utilities Commission Rule 007, effective February 1, 2016.

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 Culture and Tourism
- Alberta Environment and Parks
- Alliance Pipeline Ltd.
- Alberta Transportation
- ATCO Gas and Pipeline Ltd.
- Battle River Rural Electrification Association
- Canadian Natural Resources Ltd.
- CNR (Echo) Resources Inc.
- CN Rail
- Cochin Pipe Lines Ltd.
- Cold Lake Pipeline Ltd.
- Conoco Phillips Canada Operations Ltd.
- Corridor Communications
- Crew Energy Ltd.
- Department of Fisheries and Oceans
- Department of National Defense
- Ducks Unlimited
- Enbridge Pipelines Ltd.
- Husky Oil Operations Ltd.



- Iron Creek Gas Co-Op
- Long Run Exploration Ltd.
- Municipal District of Wainwright
- NAV Canada
- Penn West Petroleum Ltd.
- Perpetual Energy Operation Corporation
- Phoenix Gas Co-Op
- Signalta Resources Ltd.
- Spur Resources Ltd.
- Surge Energy Inc.
- Town of Wainwright
- Transport Canada
- Telus Corporation
- Questfire Energy Corporation
- Village of Irma
- Zargon Oil & Gas Ltd.

The AESO used a variety of methods to notify Stakeholders on the need for the Wainwright 51S Substation Connection Enhancement. 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/32929.html on November 25, 2015 and a notice was published in the AESO Stakeholder Newsletter on November 26, 2016. Copies of the Need Overview posting and the AESO Stakeholder Newsletter notice have been included as Attachments 1 and 2, respectively.

The AESO Need Overview was also included with two TFO project-specific information packages, which were sent by mail and/or email to the Stakeholders noted above between October 13, 2015 and June 27, 2016.

The first project-specific information package was sent to Stakeholders between October 2015 and February 2016 and included the TFO's October 2015 project newsletter, which is included as Attachment 3.

The second project-specific information package was sent to Stakeholders between March 2016 and June 2016 and included the TFO's March 2016 project newsletter. The TFO's March 2016 project newsletter is included as Attachment 4.

The AESO Need Overview was also posted on the TFO project-specific webpage on October 13, 2015 and was made available at the TFO's open house for the project held on April 7, 2016 at the Wainwright Communiplex in the Town of Wainwright.



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 (www.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 Wainwright 51S substation connection enhancement.

1.2 Public Notification

Most recently, on July 12, 2016, the AESO published a Public Notification of NID Filing to the AESO website at http://www.aeso.ca/transmission/32929.html and a notice in the AESO Stakeholder Newsletter. Copies of the Public Notification of NID Filing posting and the AESO Stakeholder Newsletter notice have been included as Attachments 5 and 6, 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 TFO's Project Newsletter Fortis Wainwright Transmission Reinforcement - October 2015
- Attachment 4 TFO's Project Newsletter Fortis Wainwright Transmission Reinforcement- Volume 2 March 2016
- Attachment 5- AESO Public Notification of NID Filing (AESO Website Posting)
- Attachment 6 AESO Stakeholder Newsletter NID Filing Notice



Attachment 1 – AESO Need Overview



Transmission Reinforcement in the Wainwright Area

FortisAlberta Inc. (FortisAlberta) has applied to the Alberta Electric System Operator (AESO) for transmission system access to improve the reliability of the power system in the Wainwright area. FortisAlberta's request can be met by the following solution:

PROPOSED SOLUTION

- Building approximately 30 kilometres of 138 kV transmission line
- Adding two 138 kV breakers and other associated equipment to the existing Wainwright 51S substation

NEXT STEPS

- The AESO intends to apply to the Alberta Utilities Commission (AUC) for approval of the need in Spring 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.

The following organizations have key roles and responsibilities in providing access to the transmission system:

THE AESO:

- Must plan the transmission system and enable access to it for generators and other qualified customers
- Is regulated by the AUC and must apply to the AUC for approval of its NID

ALTALINK MANAGEMENT LTD.:

- Is the transmission facility owner in the Wainwright area
- Is responsible for detailed siting and routing, constructing, operating and maintaining the associated transmission facilities
- Is regulated by the AUC and must apply to the AUC for approval of its transmission facilities applications



FAST FACT

Alberta's electric transmission system comprises the towers, wires and

related equipment that are a part of moving electricity from where it is generated to where it is used.

CONTACT US

We appreciate your views, both on the need for transmission system development and proposed transmission plans. If you have any questions or comments, please contact us directly.

Alberta Electric System Operator Marina Lakhani

AESO Stakeholder Relations

stakeholder.relations@aeso.ca 1-888-866-2959

2500, 330-5th Avenue SW Calgary, AB T2P 0L4 Phone: 403-539-2450

Fax: 403-539-2949

www.aeso.ca

www.poweringalberta.ca

E @theaeso

WHO IS THE AESO?

The Alberta Electric System Operator (AESO) is a not-for-profit organization with no financial interest or investment of any kind in the power industry. We plan and operate Alberta's electricity grid and wholesale electricity market safely, reliably and in the public interest of all Albertans.

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 purpose 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.



Attachment 2 – AESO Stakeholder Newsletter Need Overview Notice

Transmission Reinforcement in the Wainwright Area

FortisAlberta Inc. has applied to the AESO for transmission system access to improve the reliability of the power system in the Wainwright area. FortisAlberta's request can be met by the following solution:

- Building approximately 30 km of 138 kV transmission line
- Adding two 138 kV breakers and other associated equipment to the existing Wainwright 51S substation

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 > Wainwright 51S Connection Upgrade.



Attachment 3 – TFO's Project Newsletter – Fortis Wainwright Transmission Reinforcement (October 2015)



You are receiving this newsletter because you are near the Fortis Wainwright Transmission Reinforcement project and we want your input.

Transmission system reinforcements in the Wainwright area are required to ensure that residents, businesses and industrial facilities continue to have a reliable supply of electricity for years to come.

Fortis has requested this project to help improve the reliability of the power system in the area.

Please note:

You may have received previous communication from us about the Central East Transmission Development (CETD) project. The Alberta Electric System Operator (AESO) has proposed to modify the scope of CETD and has applied to the Alberta Utilities Commission (AUC) for approval. While located in the same area, the Fortis Wainwright Reinforcement project is separate from CETD. Additionally, the AESO has advised AltaLink that existing 69 kV transmission lines in the area, called the 61L and 61AL, may be discontinued for transmission use.

For more information on the other developments please contact the AESO or visit www.aeso.ca.

Please join us at our open house on November 24, 2015 from 3 - 7 p.m. at the Wainwright Communiplex. Further details inside.

DEFINITIONS

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

1-877-269-5903

stakeholderrelations@altalink.ca www.altalink.ca/projects

DEFINITIONS

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.

Alberta Electric System Operator

The Alberta Electric System Operator (AESO) is an independent, notfor-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.

Project details

The proposed project involves building a new transmission line and upgrading the existing Wainwright **Substation** located within SE-10-45-7-W4.

We are proposing to build approximately 30 kilometres (19 miles) of 138 kilovolt (kV) transmission line. We have included a number of route options for the line. Please see the enclosed maps for more details about these routes.

Substation upgrades

To accommodate the new line, we are proposing to upgrade the existing Wainwright Substation. The upgrades include adding:

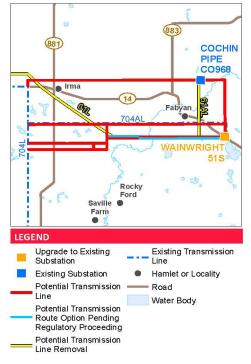
- two new 138 kV breakers
- other associated equipment

In addition, a 20 metre (65 feet) fenceline expansion to the north of the substation will be required to accommodate these upgrades. This expansion will occur on AltaLink owned land.

As noted previously the AESO has informed us that there is a potential for 61L to be discontinued for transmission use. If this occurs and upon approval of the removal of the 61L transmission line by the Alberta Utilities Commission (AUC), a portion of the 61L route would become a route option for the new 138kV transmission line. This potential route is shown as the turquoise line on the detailed photo map (DP1).



The existing Wainwright Substation is pictured above.



Transmission structures

The proposed transmission structures will be either single or two pole and will:

- be wood or steel
- be approximately 17-21 metres (57 70 feet) tall
- have a distance between structures of approximately 100 250 metres (330 - 820 feet)
- have a right-of-way of approximately 20 metres (65 feet) when located on private property and may require approximately 10 metres (33 feet) of right-of-way on the adjacent lands when located in road allowance for construction access and vegetation removal





The proposed structures will look similar to the ones pictured above.

DID YOU KNOW?

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.

Your feedback is important to us

The people living and working in the area know the land and the communities best. We do not predetermine where a transmission line might go. Consultation with stakeholders is an important part of the siting process when trying to determine the route with a low overall impact.

Route selection

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

Important crite	ria	
	Agricultural	Impact on crop productionReduced efficiency of field operations
	Residential	Proximity to residencesImpact on developable lands and constraints on future development
	Environmental	Alteration of natural areas and impacts to environmental features
H	Cost	Construction cost and land acquisition costs
	Electrical	Reliability and reparability of the line
	Visual	 Visual impact of structures and lines as seen from residences and recreational areas
	Special considerations	Electrical interference with radio transmitting stations and other telecommunication equipment, etc.

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 the Health Canada and 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



Alberta's natural landscapes are home to many diverse animals, including more than 400 different species of birds. Through Altalink's Avian Protection Program we offer unique solutions for birds including constructing nesting platforms for the endangered ferruginous hawk, relocating osprey nests from power poles to safe nesting places and much more.



We're active in protecting wildlife and have several programs in place including the first-of-its-kind GREENJACKET – a product that protects wildlife from coming into contact with equipment in substations. And that's just the beginning. For more information, including our innovative environmental programs, please visit www.altalink.ca/environment.

DEFINITION

Alberta Utilities Commission

The Alberta Utilities Commission (AUC) ensures the fair and responsible delivery of Alberta's utility services. AltaLink submits applications for new transmission projects to the AUC in a public process where they are reviewed.

How to provide your input

Stakeholder input is critical to identifying a low overall impact solution for this project. After this initial stage of consultation we will use your input as part of our route selection process and will consult and notify you again about the refined route options.

You can provide your input in any of the following ways.

ATTEND OUR OPEN HOUSE

We will be available to share information, gather your input and respond to any questions or concerns you might have.

Date	Location	Address	Time
November 24, 2015	Wainwright Communiplex	700 2 Ave. Wainwright AB T9W 1C4	3 p.m. – 7 p.m.

PARTICIPATE IN A ONE-ON-ONE CONSULTATION

We will contact all occupants, residents and landowners who are located on or directly adjacent to the Fortis Wainwright Transmission Reinforcement project to gather input through one-on-one consultations.

During the one-on-one process we will document the information you provide and respond to any questions or concerns you may have about the project.

AltaLink is committed to sharing information about its projects and working with the public to gather and respond to stakeholder input and concerns. A summary of stakeholder comments will be incorporated into the application submitted to the Alberta Utilities Commission (AUC).

CONTACT US DIRECTLY

You can contact us by telephone, email, mail or through our website. Our contact information is on the front and back pages of this newsletter.

What's next?

The Alberta Electric System Operator (AESO) determined this transmission system development is needed and will file a **Needs Application** with the AUC. After our consultation process is complete we will file a **Facilities Application** with the AUC. We will inform stakeholders of the routes we file with the AUC. If this project is approved, only one route will be constructed.

The AUC will review both the Needs Application and the Facilities Application at the same time through a process in which stakeholders can participate. To learn more about the AUC process and how you can become involved, please refer to the brochure included in this package titled *Public invovlement in a proposed utility development*.

Anticipated project schedule

Notify and consult with stakeholders	Fall 2015 - Spring 2016
File application with Alberta Utilities Commission (AUC)	Spring 2016
Start construction if project is approved	Summer 2017
Completed construction	Summer 2018

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.

Projects in the area

AltaLink is working on another project in the area to make sure your lights come on at the flick of the switch.

Project name	Description	Status
Central East Transmissoin Development (CETD)	AltaLink proposed to upgrade its transmission system in the Wainwright, Provost and surrounding areas to make sure residents, businesses and industrial facilities continue to have a reliable supply of electricity for years to come.	On hold. For more information on the other developments of CETD please contact the AESO or visit www.aeso.ca.

DEFINITION

Needs Application

The AESO submits Needs
Applications to the AUC for review.
A Needs Application describes why
a transmission project is required.
The AUC may review a Needs
Application at the same time it
reviews a Facilities Application,
or may review each application
separately. The AUC must approve
a Needs Application before
construction can begin.

DEFINITION

Facilities Application

AltaLink submits Facilities
Applications to the AUC for review.
A Facilities Application describes
how AltaLink proposes to meet the
requirements for a transmission
project. It includes routing
details, results of the participant
involvement program and technical
details. Facilities Applications must
be approved by the AUC before
construction can begin.



Contact us

To learn more about the proposed Fortis Wainwright Transmission Reinforcement, please contact:

ALTALINK

1-877-269-5903 (toll-free)

Email: 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 (toll-free)

Email: stakeholder.relations@aeso.ca

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

ALBERTA UTILITIES COMMISSION (AUC)

780-427-4903

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

Email: utilitiesconcerns@auc.ab.ca

PRIVACY COMMITMENT

AltaLink is committed to protecting your privacy. Your personal information is collected and 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 the 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.



2611 - 3rd Avenue SE Calgary, Alberta T2A 7W7

Let's talk transmission

www.facebook.com/altalinktransmission



www.twitter.com/altalink





Attachment 4 – TFO's Project Newsletter – Fortis Wainwright Transmission Reinforcement (March 2016 Volume 2)





Electric system improvements near you

Fortis Wainwright Transmission Reinforcement



PLEASE NOTE:

For stakeholders who are no longer on a proposed route, you will not receive any further correspondence from us about this project. If you wish to follow the progress of the project or if you have questions, please contact us using any of the ways listed in this newsletter.

We would like to provide you with an update about our progress with the proposed Fortis Wainwright Transmission Reinforcement project.

Using stakeholder input gathered during our first round of consultation and through consideration of other factors, we have refined our routes for the proposed **transmission** lines and determined preferred and alternate routes and have removed other route options from consideration.

As a follow-up to the first round of consultation on the Fortis Wainwright Transmission Reinforcement project, we are providing you with:

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

What progress have we made?

The feedback gathered from stakeholders during one-on-one consultation, along with results from field work, preliminary engineering and further analysis, have been used to refine the route options for the project. Altalink will undertake further consultation with stakeholders and additional survey work on the remaining routes before filing a facility application with the **Alberta Utilities Commission (AUC)** in Summer 2016. The routes and project details are described in this information package.

Please join us at our open house on Thursday, April 7, 2016 from 3 - 7 p.m. at the Wainwright Communiplex. Further details inside.

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The transmission system connects
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The Alberta Utilities Commission (AUC) ensures the fair and responsible delivery of Alberta's utility services. AltaLink submits applications for new transmission projects to the AUC and the AUC reviews them in a public process.

CONTACT US

1-877-267-1453 stakeholderrelations@altalink.ca Visit us online at www.altalink.ca/regionalprojects

DEFINITIONS

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.

Alberta Electric System Operator

The AESO is an independent, notfor-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. You can also make your questions or concerns known to an AltaLink representative who will collect your personal information for the purpose of addressing your questions and/or concerns to the AESO. This process may include disclosure of your personal information to the AESO.

The existing Wainwright Substation is pictured on the right.

Project details

Fortis has requested this project to help improve the reliability of the power system in the area. Transmission system reinforcements in the Wainwright area are required to ensure that residents, businesses and industrial facilities continue to have a reliable supply of electricity for years to come. The proposed project involves building a new transmission line and upgrading the existing Wainwright Substation located within SE-10-45-7-W4.

We are proposing to build approximately 26 kilometres (16 miles) of 138 kilovolt (kV) transmission line. Please see the enclosed maps for more details about these routes.

Substation upgrades

To accommodate the new line, we are proposing to upgrade the existing Wainwright Substation. The upgrades include adding:

- two new 138 kV breakers
- other associated equipment

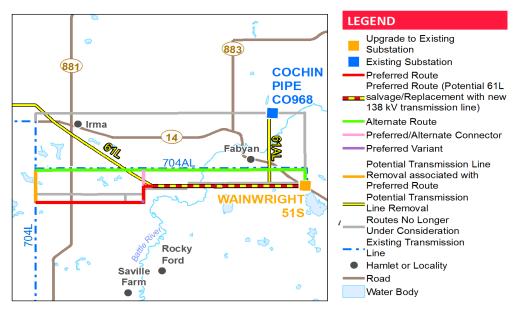
In addition, approximately a 20 metre (65 feet) fenceline expansion to the north and two metres (6.5 feet) to the west of the substation will be required to accommodate these upgrades. This expansion will occur on AltaLink owned land.

Please note:

Since our previous mailout the **AESO** has informed us that the 61L and 61AL transmission lines will be discontinued for transmission use. If you are affected by the removal of this line, you will be contacted by us separately.

You may have received previous communication from us about the Central East Transmission Development (CETD) project. For more information on the other developments please contact the AESO or visit www.aeso.ca.





How did we determine preferred and alternate routes?

Of the potential routes considered in the Fortis Wainwright project area, we believe the preferred is the best solution for this project as it has low overall environment, social and economic effects. The alternate route also presents a viable alternative. None of these options have been approved. We intend to submit these routes in our facilities application to the Alberta Utilities Commission (AUC). The AUC can approve either route or a combination of the preferred and alternate route in their decision.

Route selection

AltaLink takes several factors into consideration in an effort to find a route or routes with low overall environmental, social and economic effects. In addition to stakeholder input some of the factors we consider include:

- Agricultural
- Residential
- Environmental
- Visual
- Cost

Stakeholder input with respect to the effects listed above is an important part of our planning process. Please let us know what other factors are important to you.

The people living and working in the area know the land and the communities best. We do not predetermine where a transmission line might go. Consultation with stakeholders is an important part of the siting process when trying to determine the route with a low overall impact.



Alberta's natural landscapes are home to many diverse animals, including more than 400 different species of birds. Through Altalink's Avian Protection Program we offer unique solutions for birds including constructing nesting platforms for the endangered ferruginous hawk, relocating osprey nests from power poles to safe nesting places and much more.



We're active in protecting wildlife and have several programs in place including the first-of-its-kind GreenJacket™ – a product that protects wildlife from coming into contact with equipment in substations. And that's just the beginning. For more information, including our innovative environmental programs, please visit www.altalink.ca/environment.

Preferred route

The preferred route follows the existing alignment of 61L from the Wainwright 51S substation to point designation C5. From C5, it follows Range Road 85 and Township Road 450 to D25.

This route is the preferred route for some of the following reasons:

- it follows linear disturbances
- it provides the opportunity to re-use an existing right-of-way for a portion of the route
- it has low residential effects
- it has low agricultural effects

Preferred route variant

As a result of further field work, a variant to the preferred route has been added in the south east corner of SE-6-45-8-W4 between point designations D3 and D7. This adjustment angles across the quarter section in order to avoid a steep, sloped area, and would reduce tree clearing and cost.

If the preferred route is approved, approximately 3.2 km (2 miles) of existing 138 kV transmission line can be removed between B20 and D25.

Alternate route

The alternate route follows Range Road 72 north to point designation A5. From there, it turns west and follows Township Road 452 to B20.

This route segment is being considered for some of the following reasons:

- it follows existing linear disturbances
- it provides good access for maintenance and operation of the line
- it has low agricultural impacts

Preferred/Alternate connector

The route segment between designation points C5-B10 (as seen on the DP1 map included in this package), connects the preferred and alternate routes, enabling different route segment combinations.

Previously considered route segments

We removed several route segments from consideration based on their agricultural and environmental effects, constructability factors, cost and stakeholder feedback. In an effort to determine low overall environmental, social and economic effects, we carefully analyzed all the route options and have removed the route segments indicated as a grey line on the location map (page 2) and the DP map included in this package.

Transmission structures

The proposed transmission structures, which will be either single or two pole and will:

- be wood or steel
- be approximately 17-22 metres (57 72 feet) tall
- have a distance between structures of approximately 100 250 metres (330 - 820 feet)

In some areas, distribution lines may be underbuilt on the transmission line.

Easements, off right-of-way access and construction workspace

Where the transmission line is located on property AltaLink will require a 20 metre (65 feet) right-of-way, which will be acquired from landowners in the form of an easement agreement. AltaLink may require additional off right-of-way access and construction workspace outside of the right-of-way in certain areas during construction. The construction workspace is shown on the Strip Mosaic maps along the entire length of the line. AltaLink will consult with all affected landowners regarding the potential construction workspace. Not all of this construction workspace and off right-of- way access is required. All construction workspace and off right-of-way access will be discussed with landowners prior to, and during construction of the line.

Where the transmission line is proposed in road allowance, AltaLink may require a 10 metre (33 feet) right-of-way on adjacent property for access and vegetation removal. In addition to this right-of-way, AltaLink may require an additional 10 metre (33 feet) of construction workspace on property in order to construct the transmission line. The construction workspace is intended to be primarily used for access of equipment during construction.

AltaLink may need up to 100 metres (328 feet) for stringing behind some corner structures. The additional construction workspace, including the potential stringing areas are shown on the strip mosaic maps. Similar to where the line is located on property AltaLink will not require all of the construction workspace. All construction workspace will be discussed with landowners prior to, and during construction of the line.

A structure with distribution underbuild, a two pole structure and a one pole structure are pictured below.









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 the Health Canada and 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

Anticipated project schedule

Notify and consult with stakeholders	Fall 2015 - Spring 2016
File application with Alberta Utilities Commission (AUC)	Summer 2016
Start construction if project is approved	Summer 2017
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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.

How to provide your input

Stakeholder input is critical to identifying a low overall impact solution for this project. You can provide your input in any of the following ways:

ATTEND OUR OPEN HOUSE

We will be available to share information, gather your input and respond to any questions or concerns you might have.

Date	Location	Address	Time
Thursday, April 7, 2016	Wainwright Communiplex	700 2 Ave. Wainwright AB T9W 1C4	3 p.m. – 7 p.m.

PARTICIPATE IN A ONE-ON-ONE CONSULTATION

We will contact all occupants, residents and landowners who are located on or directly adjacent to the Fortis Wainwright Transmission Reinforcement project to gather input through one-on-one consultations.

During the one-on-one process we will document the information you provide and respond to any questions or concerns you may have about the project.

AltaLink is committed to sharing information about its projects and working with the public to gather and respond to stakeholder input and concerns. A summary of stakeholder comments will be incorporated into the application submitted to the Alberta Utilities Commission (AUC).



What's next?

The Alberta Electric System Operator (AESO) received a system access request from Fortis to improve the reliability in the Wainwright area. The AESO will file a **Needs Application** with the AUC. After our consultation process is complete we will file a **Facilities Application** with the AUC. We will inform stakeholders of the routes we file with the AUC. If this project is approved, only one route will be constructed.

The AUC will review both the Needs Application and the Facilities Application at the same time through a process in which stakeholders can participate. To learn more about the AUC process and how you can become involved, please refer to the brochure included in this package titled *Public invovlement in a proposed utility development*.

Projects in the area

AltaLink is working on another project in the area to make sure your lights come on at the flick of the switch.

Project name	Description	Status
Central East Transmission Development (CETD)	AltaLink proposed to upgrade its transmission system in the Wainwright, Provost and surrounding areas to make sure residents, businesses and industrial facilities continue to have a reliable supply of electricity for years to come.	On hold. For more information on the other developments of CETD please contact the AESO or visit www. aeso.ca.
61L/61AL Transmission Line Removal	The Alberta Electric System Operator has recently informed AltaLink that the 61L and 61AL transmission lines are no longer needed for transmission use. These 69 kilovolt (kV) transmission lines were built in the 1950's and have reached the end of their life. We are proposing to remove these transmission lines from service.	Consultation is currently underway.

DEFINITION

Needs Application

The AESO submits Needs
Applications to the AUC for review.
A Needs Application describes why
a transmission project is required.
The AUC may review a Needs
Application at the same time it
reviews a Facilities Application,
or may review each application
separately. The AUC must approve
a Needs Application before
construction can begin.

DEFINITION

Facilities Application

AltaLink submits Facilities
Applications to the AUC for review.
A Facilities Application describes
how AltaLink proposes to meet the
requirements for a transmission
project. It includes routing
details, results of the participant
involvement program and technical
details. Facilities Applications must
be approved by the AUC before
construction can begin.

WANT TO RECEIVE PROJECT UPDATES VIA EMAIL?

Visit altalink.ca/projects and search for "Fortis Wainwright Transmission Reinforcement" to subscribe.



Contact us

To learn more about the proposed Fortis Wainwright Transmission Reinforcement, please contact:

ALTALINK

1-877-267-1453 (toll-free)

Email: 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 (toll-free)

Email: stakeholder.relations@aeso.ca



2611 - 3rd Avenue SE

Calgary, Alberta T2A 7W7

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

ALBERTA UTILITIES COMMISSION (AUC)

780-427-4903

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

Email: utilitiesconcerns@auc.ab.ca

Let's talk transmission

www.facebook.com/altalinktransmission



www.twitter.com/altalink



PRIVACY COMMITMENT

AltaLink is committed to protecting your privacy. Your personal information is collected and 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 the 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.



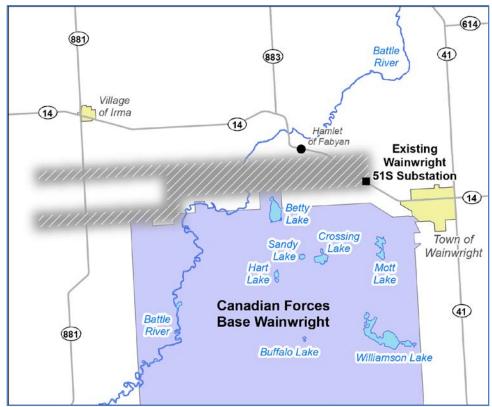
Attachment 5 – AESO Public Notification of NID Filing (AESO Website Posting)

AESO Public Notification of NID Filing

Addressing the Need for Upgrades to the Wainwright 51S substation connection in the Town of Wainwright Area

The Alberta Electric System Operator (AESO) advises you that it intends to file a Needs Identification Document (NID) for the Wainwright 51S Substation Connection Upgrade with the Alberta Utilities Commission (AUC) on or after July 27, 2016.

FortisAlberta Inc. (FortisAlberta) has applied to the AESO for transmission system access to improve reliability in the Town of Wainwright area. FortisAlberta's request can be met by upgrading the existing Wainwright 51S substation connection configuration from a T-tap to an in-and-out connection. This involves building approximately 25 kilometres of 138 kV transmission line to connect the Wainwright 51S substation to the existing 138 kV transmission line 704L, and adding two 138 kV circuit breakers and associated equipment to the Wainwright 51S substation.



The shaded area on the map indicates the approximate location of the transmission facility development and the black shaded square indicates the approximate location of the existing Wainwright 51S substation, which is in SE-10-45-7-W4. In a separate application called a Facility Application, AltaLink Management Ltd. (AltaLink), the transmission facility owner (TFO) in the Town of Wainwright area, will describe the transmission development and request AUC approval to construct and operate the specific transmission facilities. The exact line route may extend beyond the area shown.

The AESO and AltaLink presented this need to stakeholders, including residents, occupants and landowners, from October 2015 to July 2016. 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/32929.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 6 – AESO Stakeholder Newsletter NID Filing Notice

Wainwright 51S Connection Upgrade – Notice of NID Filing

FortisAlberta Inc. has applied to the AESO for transmission system access to improve reliability in the Town of Wainwright area. FortisAlberta's request can be met by upgrading the existing Wainwright 51S substation connection configuration from a T-tap to an in-and-out connection. This involves building approximately 25 kilometres of 138 kV transmission line to connect the Wainwright 51S substation to the existing 138 kV transmission line 704L, and adding two 138 kV circuit breakers and associated equipment to the Wainwright 51S substation.

The AESO intends to file the Wainwright 51S Substation Connection Upgrade Needs Identification Document (NID) application with the Alberta Utilities Commission (AUC) on or after July 27, 2016, requesting that the AUC approve this NID.

The AESO has posted the public notification for its NID filing 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 > Wainwright 51S Substation Connection Upgrade to see all the relevant documents, including the NID application once it is filed with the AUC.