

APPENDIX C AESO PIP

Cooking Lake 522S Substation Upgrade

Needs Identification Document

1.0 Participant Involvement Program (PIP)

From February 2016 to May 2016, the AESO conducted a Participant Involvement Program (PIP) to assist in preparing its *Cooking Lake 522S 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 Alberta Utilities Commission Rule 007 requirements.

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):

- Strathcona County
- Leduc County
- Alberta Culture and Tourism – Archaeological Survey section
- Alberta Environment and Parks – Fish and Wildlife
- FortisAlberta Inc.
- TELUS Communications Inc.

The AESO used a variety of methods to notify Stakeholders on the need for the Cooking Lake 522S 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/33196.html> on February 10, 2016 and a notice was published in the AESO Stakeholder Newsletter on February 11, 2016. 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 February 2, 2016 to the Stakeholders noted above. Attachment 3 includes a copy of AltaLink's 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 (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 proposed transmission development.

1.2 Public Notification

Most recently, the AESO published a Public Notification of NID Filing to the AESO website at <http://www.aeso.ca/transmission/33196.html> on May 11, 2016 and a notice in the AESO Stakeholder Newsletter on May 12, 2016. Copies of the Public Notification of NID 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 – *Fortis Cooking Lake 522S Transformer Addition* (January 2016)
- Attachment 4 – AESO Public Notification of NID Filing (AESO Website Posting)
- Attachment 5 – AESO Stakeholder Newsletter NID Filing Notice

Attachment 1 – AESO Need Overview

Need for the Cooking Lake 522S Substation Upgrade south of Cooking Lake

FortisAlberta Inc. (FortisAlberta) has applied to the Alberta Electric System Operator (AESO) for transmission system access to reliably serve growing demand for electricity in the Cooking Lake area. FortisAlberta's request can be met by the following solution:

> PROPOSED SOLUTION

- Upgrade the existing Cooking Lake 522S substation, including adding a 138/25 kV transformer, two 138 kV circuit breakers, and associated equipment.

> NEXT STEPS

- The AESO intends to apply to the Alberta Utilities Commission (AUC) for approval of the need in mid-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 Cooking Lake 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
Susan Haider

AESO Stakeholder Relations

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

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Calgary, AB T2P 0L4
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www.aeso.ca
www.poweringalberta.ca
@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

Cooking Lake 522S Substation Upgrade – Need for Transmission System Development south of Cooking Lake

FortisAlberta Inc. has applied to the AESO for transmission system access to reliably serve growing demand for electricity in the Cooking Lake area. FortisAlberta's request can be met by upgrading the existing Cooking Lake 522S substation, including adding a 138/25 kV transformer, two 138 kV circuit breakers, and associated equipment.

The AESO has posted a Need Overview for this project on its website. Please [click here](#) to view the document or visit the AESO website at www.aeso.ca and follow the path Transmission > Needs Identification Documents > Cooking Lake 522S Substation Upgrade.

**Attachment 3 – AltaLink’s Information Brochure – *Fortis
Cooking Lake 522S Transformer Addition* (January 2016)**

Electric system improvements near you

Fortis Cooking Lake 522S Transformer Addition

AltaLink's transmission system efficiently delivers electricity to 85 per cent 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.

Thank you for your continued involvement with AltaLink projects in your area. You are receiving this newsletter because you are near the Fortis Cooking Lake 522S Transformer Addition project and we want your input.

Fortis has requested upgrades to the electric system in your area as it has grown significantly in recent years and the demand for electricity has increased. **Substation** upgrades are required at a site near you to ensure residents and businesses continue to have a reliable supply of electricity.

We are providing you with:

- project details
- map of the proposed project site
- information about how you can provide your input
- the project schedule

You may be aware of the proposed Cooking Lake 138 kV Transmission Line and Substation Upgrade Project, part of the South and West of Edmonton Area Transmission Development. AltaLink submitted an application to the Alberta Utilities Commission for this project in October 2015. This project is a separate project and is called the Fortis Cooking Lake 522S Substation Transformer Addition Project. If you have questions about either project please contact us using the contact information provided in this newsletter.

DEFINITION:

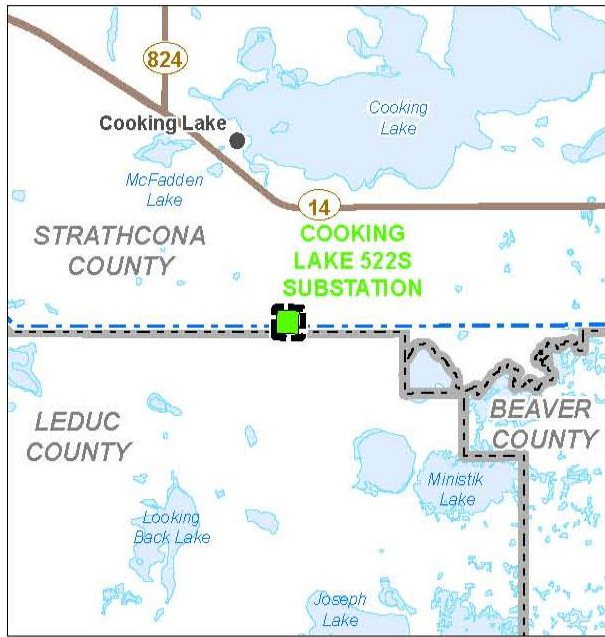
Substation

Substations are the connection points between power lines of varying voltages and contain equipment that controls and protects the flow of power.







CONTACT US

1-877-267-1453

stakeholderrelations@altalink.ca
www.altalink.ca/regionalprojects



LEGEND

-  Potential Upgrade to Existing Substation
-  Existing Transmission Line
-  Hamlet or Locality
-  Municipal or County Boundary
-  Road
-  Water Body

The location of the Cooking Lake substation is illustrated above.



A typical transformer is pictured to the left.



The existing Cooking Lake substation is pictured above.

Project details

The proposed project includes upgrading equipment in the Cooking Lake Substation located in SW-6-51-21-W4M south of Edmonton and East of the Town of Beaumont in Strathcona County.

If approved, the upgrades to the existing substation include installing:

- one new 138/25 kilovolt (kV) transformer
- two new 138 kV circuit breakers
- one new switchgear and control building
- upgrading some existing equipment

Additionally, one existing 25kV circuit breaker will be salvaged, and within the new switchgear building we will be installing six, 25 kV circuit breakers.

Transformers step down or step up the voltage in a substation so power can be distributed safely through distribution lines. During construction, a mobile substation may be used to maintain electrical service and reliability in your area. It may be located outside the substation fence but will be on AltaLink owned land.

A substation fence line expansion will be required to accommodate the proposed upgrades associated with this project. No new land is required, as the fence expansion will occur on AltaLink owned land.

As a result of the Cooking Lake 138 kV Transmission Line and Substation Upgrade (part of the South and West of Edmonton Area Transmission Development), AltaLink has recently applied for an additional fence expansion to the south and east of the substation. As part of the Fortis Cooking Lake 522S Transformer Addition, AltaLink is proposing additional space to the east of the existing substation fence and the proposed fence line associated with the Cooking Lake 138 kV Transmission Line and Substation Upgrade project. If both projects are constructed, AltaLink will only build the greater area of the two fence expansions. For illustrative purposes, the fence expansions required for each project are illustrated on DP1.

These upgrades to the electric system will help support the power demands in the area and ensure that local 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 a proposed utility development*.

Anticipated project schedule

Notify and consult with stakeholders	January – May 2016
File application with Alberta Utilities Commission (AUC)	Summer 2016
Start construction if project is approved	Fall 2016
Construction completed	Spring 2017

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 UTILITIES COMMISSION (AUC)

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

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

OTHER PROJECTS IN YOUR AREA

The Cooking Lake 138 kV Transmission Line and Substation Upgrade project is part of the South and West of Edmonton Area Transmission Development. AltaLink has submitted an application for the project to the Alberta Utilities Commission (AUC) on October 16, 2015. The application can be viewed on the AUC's website at www.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 a proposed utility development*
- AESO Need Overview Document

SUBSCRIBE TO THIS PROJECT

- 1) Visit: altalink.ca/projects
- 2) Search for the project title
- 3) Click **Subscribe to Updates**

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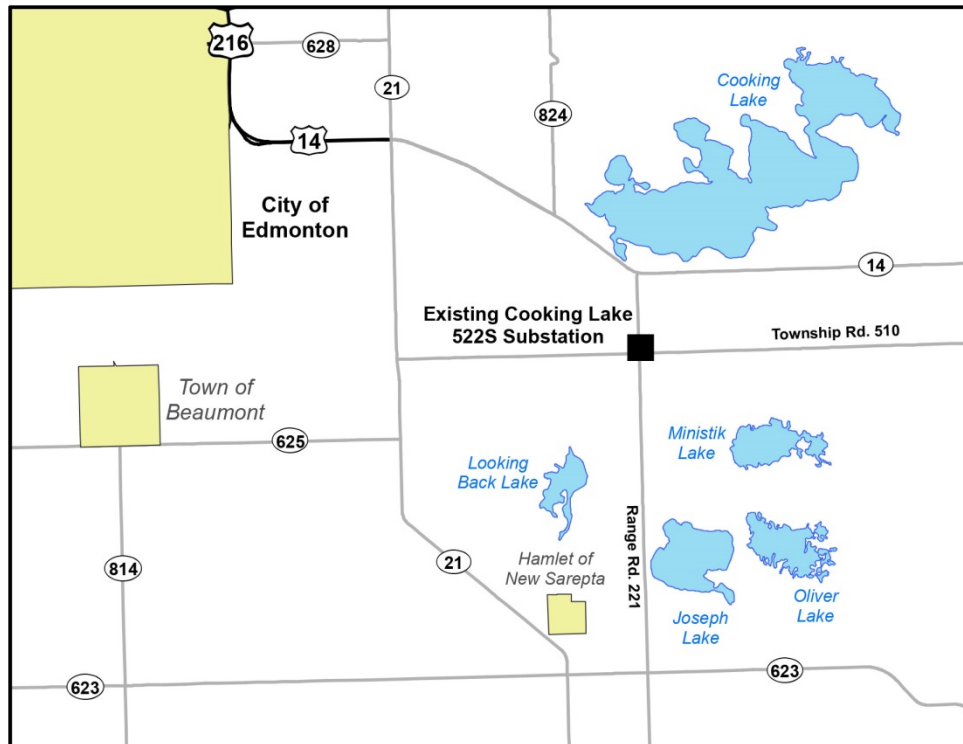
Attachment 4 – AESO Public Notification of NID Filing (AESO Website Posting)

AESO Public Notification of NID Filing

Addressing the Need for the Cooking Lake 522S Substation Upgrade south of Cooking Lake

The Alberta Electric System Operator (AESO) advises you that it intends to file a Needs Identification Document (NID) for the Cooking Lake 522S substation upgrade with the Alberta Utilities Commission (AUC) on or after May 25, 2016.

FortisAlberta Inc. (FortisAlberta) has applied to the AESO for transmission system access to reliably serve growing demand for electricity in the Cooking Lake area. FortisAlberta's request can be met by upgrading the existing Cooking Lake 522S substation, including adding a 138/25 kV transformer, two 138 kV circuit breakers and associated equipment.



The black square on the map indicates the approximate location of the Cooking Lake Substation, which is at 4-6-51-21-W4. In a separate application called a Facility Application, AltaLink Management Ltd. (AltaLink), the transmission facility owner (TFO) in the area south of Cooking Lake, will describe the specific developments and request AUC approval to construct and operate the specific transmission facilities.

The AESO and AltaLink presented this need to stakeholders, including residents, occupants and landowners, from February 2016 to May 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/33196.html>

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

Attachment 5 – AESO Stakeholder Newsletter NID Filing Notice

Cooking Lake 522S Substation Upgrade – Notice of NID Filing

FortisAlberta Inc. (FortisAlberta) has applied to the AESO for transmission system access to reliably serve growing demand for electricity in the Cooking Lake area. FortisAlberta's request can be met by upgrading the existing Cooking Lake 522S substation, including adding a 138/25 kV transformer, two 138 kV circuit breakers and associated equipment.

The AESO intends to file the Cooking Lake 522S Substation Upgrade Needs Identification Document (NID) application with the Alberta Utilities Commission (AUC) on or after May 25, 2016, requesting that the AUC approve this NID.

The AESO has posted the public notification for its NID filing on its website. Please [click here](#) to view the document or visit the AESO website at www.aeso.ca and follow the path Transmission > Needs Identification Documents > Cooking Lake 522S Substation Upgrade to see all the relevant documents, including the NID application once it is filed with the AUC.