



The 138 kV Transmission Line 807L Capacity Increase

Needs Identification Document

1.0 Participant Involvement Program

From July to September 2016, the AESO conducted a Participant Involvement Program ("PIP") to assist in preparing its 138 kV Transmission Line 807L Capacity Increase Needs Identification Document ("Application"). The AESO directed the legal owner of transmission facilities in the Fort Saskatchewan Planning Area, AltaLink Management Ltd. ("AltaLink"), to assist the AESO with its PIP activities in accordance with the requirements of NID11 and Appendix A2 of Alberta Utilities Commission Rule 007: Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments.

1.1 Stakeholder Notification

The AESO's PIP was designed to notify and provide information to stakeholders in the area where the AESO determined the capacity increase will be implemented ("Notification Area"). Specifically, occupants, residents and landowners within the Notification Area, as well as the following government bodies, agencies and other stakeholder groups were notified by the AESO (collectively, "Stakeholders"):

- Strathcona County
- Sturgeon County
- Alberta Culture
- Alberta Environment and parks (AEP) Regional Resource Management North Saskatchewan Region
- Alberta Transportation (North Central Region)
- Alberta's Industrial Heartland Association
- Agrium Products Inc.
- ATCO Energy Solutions Ltd.
- Canadian National Railway Company
- Canadian Pacific Railway
- Capital Region Northeast Water Services Commission
- FORTISALBERTA Inc.
- TELUS Communications Inc.
- Access Pipeline Inc.
- Arc Resources Ltd.

- ATCO Pipelines Ltd. c/o ATCO Gas and Pipelines Ltd.
- ATCO Gas Ltd. c/o ATCO Gas and Pipelines Ltd.
- Chevron Canada Limited
- Coronado Gas Co-op Ltd.
- Enbridge Pipelines Inc.
- Enhance Energy Inc.
- Imperial Oil Resources Limited
- Imperial Pipe Line Co.
- Inter Pipeline (Corridor) Inc.
- Keyera Energy Ltd.
- Marathon Canada Limited
- North West Upgrading Inc. c/o North West Redwater Holdings Corp.
- Pembina NGL Corporation
- Praxair Canada Inc.
- Shell Canada Limited



The AESO used a variety of methods to notify the Stakeholders on the need for transmission development and the AESO's preferred option ("Proposed Transmission Development") to meet that need. The AESO's PIP activities are more fully described below.

1.1.1 AESO Newsletter

The AESO developed a newsletter that described the need for the Proposed Transmission Development. A copy of this document was posted to the AESO website at www.aeso.ca/807Lcapacityincrease and a notice was published in the AESO Stakeholder Newsletter1 on July 12, 2016. Copies of the newsletter and the AESO Stakeholder Newsletter notice have been included as Attachments 1 and 2, respectively.

The newsletter was also included with AltaLink's project-specific information package sent by mail and/or email between July 8 and August 18, 2016 to the Stakeholders noted above. The AESO's newsletter was also posted on AltaLink's project-specific webpage on July 8, 2016. Attachment 3 includes a copy of the AltaLink brochure.

As directed by the AESO, the transmission facility owner ("TFO") was prepared to direct any inquiries or concerns about the need for the transmission development and the AESO's Proposed Transmission Development to the AESO. The TFO has indicated that the Stakeholders have not identified any concerns or objections with the need for transmission development or the AESO's Proposed Transmission Development to meet the identified need.

1.2 Public Notification of Application Filing Advertisement

Most recently, the AESO advertised its intention to file the Application in the Lamont Leader, Morinville Free Press and Redwater Review on September 13, 2016, and in the Fort Saskatchewan Record on September 15, 2016. A copy of the final proof has been included as Attachment 4. This document was posted to the AESO website at www.aeso.ca/807Lcapacityincrease and a notice was published in the AESO Stakeholder Newsletter on September 13, 2016. A copy of the AESO Stakeholder Newsletter notice has been included as Attachment 5.

¹ The AESO's twice-weekly Stakeholder Newsletter is distributed via email to everyone that has subscribed to receive it.

Alberta Electric System Operator



1.3 Opportunities to Directly Contact the AESO

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). The AESO's contact information, including the website address (www.aeso.ca and www.aeso.ca/807Lcapacityincrease), and a privacy statement that described how the AESO is committed to protecting Stakeholders' privacy, were included in the AESO's newsletter.

1.4 Stakeholder Inquiries

The AESO has not received any objections, or indication of concern, from Stakeholders or other parties regarding the need for transmission development in the Fort Saskatchewan area, or the AESO's Proposed Transmission Development to meet the identified need.

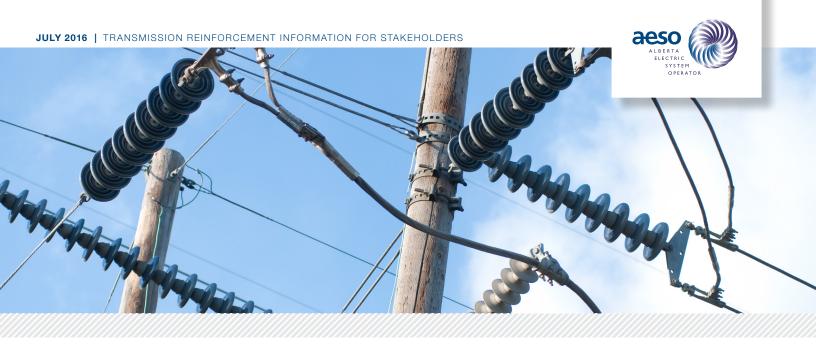
1.5 List of Attachments

- Attachment 1 AESO Newsletter 807L Transmission Line Capacity Increase (July 2016)
- Attachment 2 AESO Stakeholder Newsletter Posting (July 12, 2016)
- Attachment 3 TFO Brochure 807L Transmission Line Rebuild (June 2016)
- Attachment 4 Public Notification of Application Filing Advertisement Final Proof (September 13, 2016)
- Attachment 5 AESO Stakeholder Newsletter Notice (September 13, 2016)



Attachment 1 – AESO Newsletter

- 807L Transmission Line Capacity Increase (July 2016)



FAST FACT



Routing and siting

The AESO does not carry out detailed routing and siting of the proposed facilities.

AltaLink is the Transmission Facilities Owner (TFO) in the area. AltaLink proposes specific routes and siting details for the facilities.

Contact AltaLink for detailed construction and facilities information.

Maintaining a reliable transmission system

NEED FOR TRANSMISSION REINFORCEMENT

The demand for electricity in this area is expected to increase in 2017. The AESO has determined that the existing transmission line 807L can become overloaded under certain conditions. Overloaded transmission lines increase the likelihood of electricity interruptions. The AESO is proposing to increase the capacity of the transmission line 807L to ensure the line will not become overloaded as demand for electricity grows.

807L transmission line capacity increase

Location: Maps are included with AltaLink's newsletter in this package.

NEXT STEPS

After the AESO has prepared our Needs Identification Document (NID) and notified stakeholders of the proposed transmission system reinforcement, we will apply to the Alberta Utilities Commission (AUC) for approval of the NID.

The AESO plans to file our NID application with the AUC in fall 2016. You can view it on our website at www.aeso.ca/807Lcapacityincrease

OCUPACT US

Please contact the AESO directly with questions or comments about the need for this transmission reinforcement.



Developing transmission in Alberta

In Alberta, several steps must be completed in order to build new transmission lines and substations.

AESO

What is needed? (Needs Identification Document)

- Planning
- Stakeholder notification and addressing questions
- File NID application

AUC Decision required

- Review application
- Opportunities for stakeholder input
- Approve or reject applications

TFOIdentify location

- Routing
- Siting
- Consultation
- Detailed design
- File facilities application

AUC Decision required

- Review application
- Opportunities for stakeholder input
- Decide on application
- If approved issue Permit and Licence

TFO Build

- Construct
- Operate

Under certain circumstances specific to each project, the AESO and TFO may choose to develop their applications in tandem. In these cases, notification and consultation will be combined and the AUC approval process may be combined as well.

Roles and responsibilities

Part one: Approval of need

The AESO studies the transmission system to identify needed upgrades or expansions, and applies to the AUC for approval of our plans. The AUC is the regulator for transmission development in Alberta. The AESO's application to the AUC is called a Needs Identification Document, or NID. The NID outlines our specific plans to upgrade or expand the transmission system. Stakeholders have opportunities to become involved during the development of a NID application and during the AUC's review of it.

Part two: Approval to build

TFOs build facilities to meet the AESO's identified need. They consult with stakeholders to find locations for new transmission lines and substations and then file facilities applications (FAs) with the AUC for approval. Stakeholders also have opportunities to become involved during the development of a facilities application and during the AUC's review of it.



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.





Attachment 2 – AESO Stakeholder Newsletter Posting (July 12, 2016)

TRANSMISSION

Capacity Increase for Existing Transmission Line 807L

The AESO has identified the need for transmission reinforcement approximately eight kilometres northeast of the City of Fort Saskatchewan due to growth in electricity demand. The AESO has proposed to increase the capacity of the existing transmission line 807L to meet the identified need and preserve reliability of the transmission system. For more information, 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 > 807L Capacity Increase.



Attachment 3 – TFO Brochure – 807L Transmission Line Rebuild (June 2016)



You are receiving this newsletter because you are near the 807L Transmission Line Rebuild and we want your input.

AltaLink is proposing to rebuild a portion of an existing 138 kilovolt (kV) transmission line to help meet the growing industrial demand for power in the area.

Please see the AESO's Need Overview document included in this package for information regarding the need for this transmission line rebuild.

We are providing you with:

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

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

DEFINITION:

Transmission

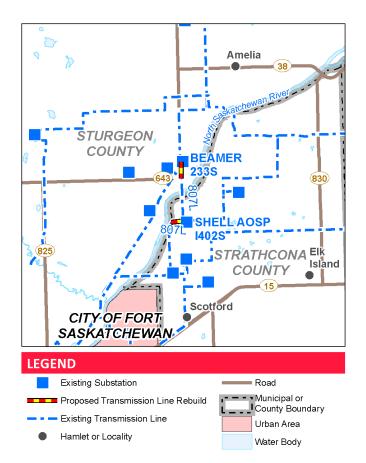
Transmission lines make up Alberta's electric highway, linking the places where power is generated to your community where power is used. Transmission lines transport large amounts of power over long distances from power plants across the province. The transmission system connects diverse sources of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

CONTACT US

1-877-267-1453

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







Above: A typical 138 kV structure. The rebuilt structures will look similar.

Project details

The proposed project involves rebuilding portions of the existing 807L transmission line. The project is located approximately eight kilometres north of the City of Fort Saskatchewan in Strathcona County and Sturgeon County.

AltaLink is proposing to upgrade the conductor (wires) on the line and replace the existing structures. If approved, two sections of the 807L line will be rebuilt for this project. The north section of the line is approximately one kilometre long (see the included FP1-DP1 map) and the south section is approximately 110 metres long (see the included FP2-DP2 map). Please see the included maps for details on proposed access trails and temporary workspace.

The existing structures on the 807L line are wood pole, single-circuit 138 kV structures that are approximately 18 to 25 metres tall. Similarly, the rebuilt structures will:

- be 138 kV single-circuit structures
- be wood or steel pole structures
- be approximately 18 to 25 metres tall
- be approximately three to five metres wide at the cross-arm
- have a distance of approximately 50 to 250 metres between structures
- be within existing road allowances and on private land in a right-of-way approximately 45 metres wide for the north section of the rebuild
- be on private land in a right-of-way approximately 17 metres wide for the south section of the rebuild





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 transmission line 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	July - August 2016
File application with Alberta Utilities Commission	October 2016
Start construction if project is approved	May 2017
Construction completed	July 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)

Email: stakeholderrelations@altalink.ca
Website: www.altalink.ca/regionalprojects

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

ALBERTA ELECTRIC SYSTEM OPERATOR (AESO)

1-888-866-2959

Email: 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 transmission system development 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 transmission system development 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 providing your questions and/or concerns to the AESO for follow up. This process may include disclosure of your personal information to the AESO.

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.)

Email: 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 email privacy@altalink.ca or phone at 1-877-267-6760.

INCLUDED IN THIS INFORMATION PACKAGE:

- Project maps
- AUC brochure: Public involvement in a proposed utility development
- AESO Need Overview Document

SUBSCRIBE TO THIS PROJECT

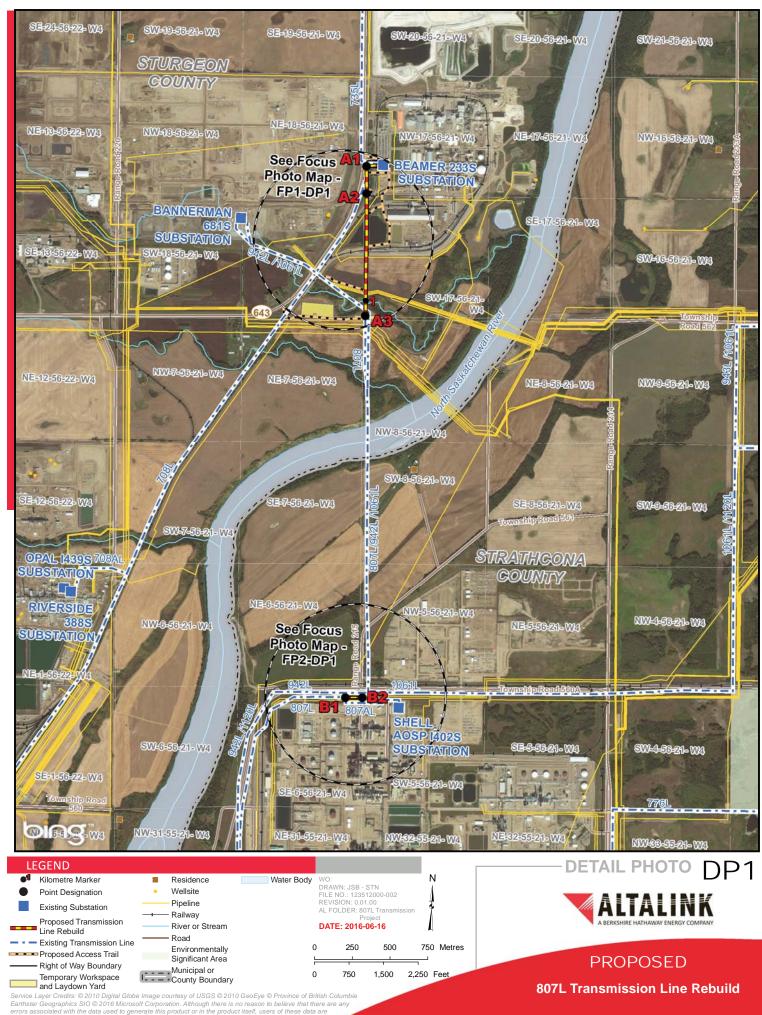
- 1) Visit: altalink.ca/projects
- 2) Search for the project title
- 3) Click Subscribe to Updates

LET'S TALK TRANSMISSION

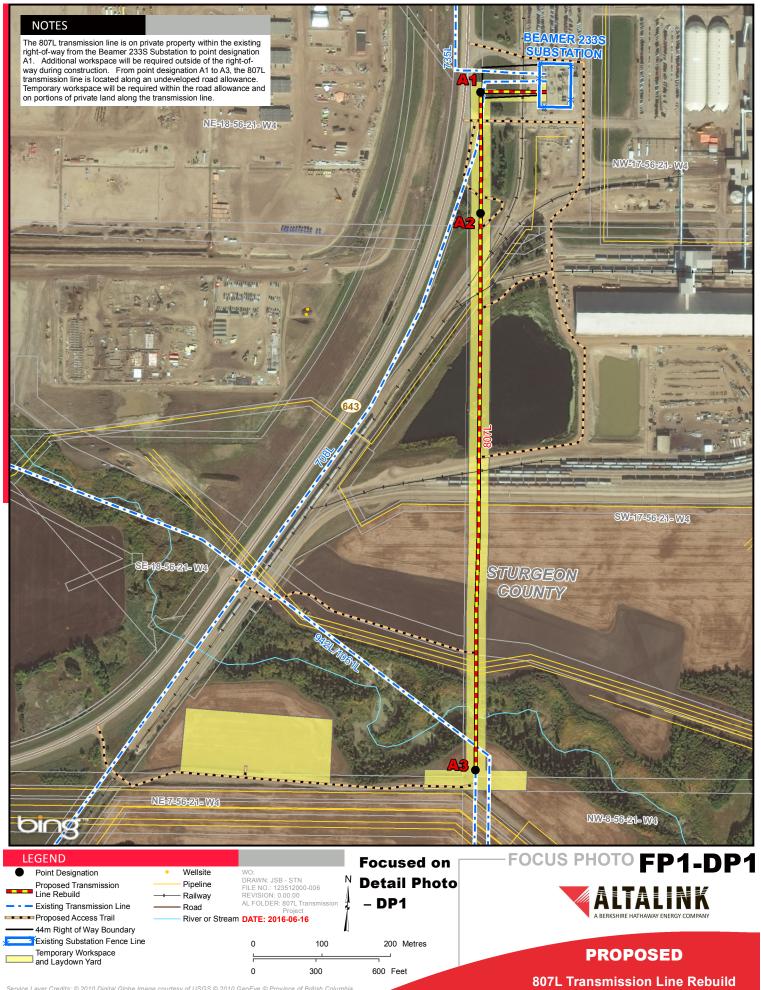


www.twitter.com/altalink

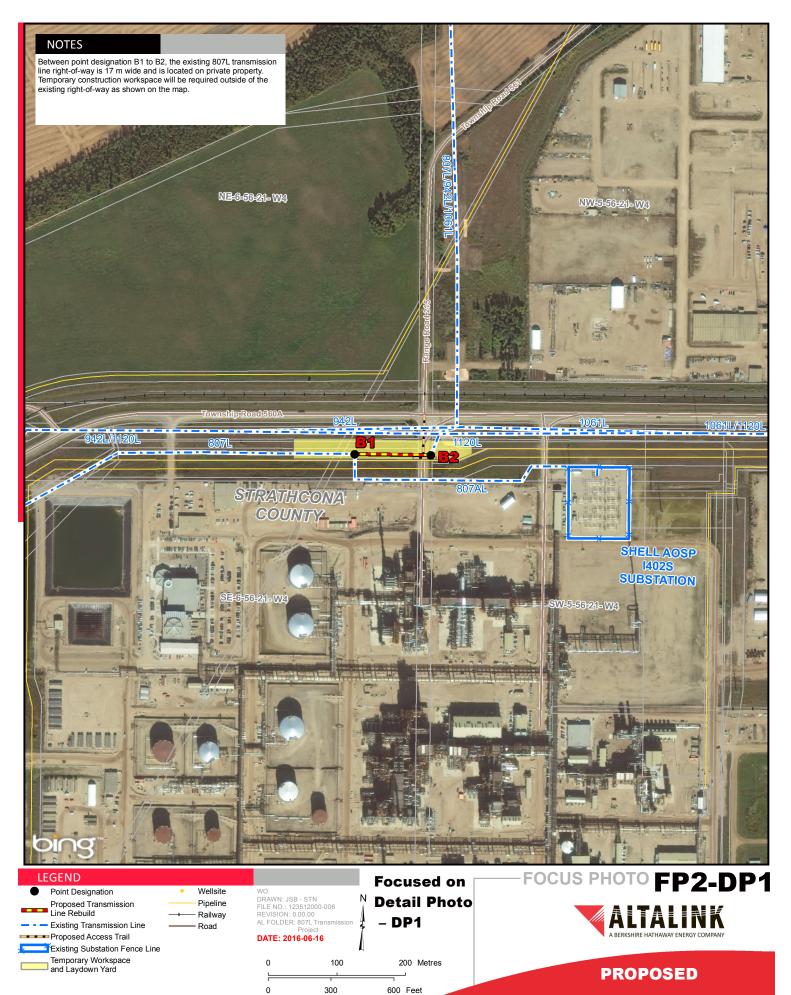




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807L Transmission Line Rebuild



Attachment 4 – Public Notification of Application Filing Advertisement- Final Proof (September 13, 2016)

Notification of the AESO Needs Identification Document (NID) filing addressing the need for a transmission capacity increase north of the City of Fort Saskatchewan

The Alberta Electric System Operator (AESO) advises you that it intends to file a NID to request approval to increase the capacity of the existing transmission line 807L with the Alberta Utilities Commission (AUC) on or after September 29, 2016.

The AESO is proposing to increase the capacity of a section of the existing transmission line 807L to accommodate future growth and enhance reliability of the power supply by ensuring the line will not become overloaded under certain conditions. This section of the line is located less than 10 kilometres north of the City of Fort Saskatchewan, between the Beamer 233S substation and the Shell AOSP 402S substation, in the counties of Sturgeon and Strathcona. For more information about the location of the line, please visit www.altalink.ca/projects/view/247/807l-transmission-line-rebuild and click on Newsletters/Maps/Updates.

Between July and September 2016, the AESO notified stakeholders, including residents, occupants and landowners, regarding the need for the proposed transmission system reinforcement, and its intention to apply to the AUC for approval of the NID. Once filed, the NID will be posted on the AESO website at www.aeso.ca/807Lcapacityincrease

In a separate application, AltaLink Management Limited will apply to the AUC for approval to construct and operate the specific facilities to meet the identified need.

For more information, please visit www.aeso.ca/807Lcapacityincrease or contact the AESO at 1-888-866-2959 stakeholder.relations@aeso.ca





Attachment 5 – AESO Stakeholder Newsletter Notice (September 13, 2016)

The 138 kV Transmission Line 807L Capacity Increase Needs Identification Document (NID) Filing – Public Notification of Regulatory Filing

The AESO is proposing to increase the capacity of a section of the existing transmission line 807L to accommodate future growth and enhance reliability of the power supply by ensuring the line will not become overloaded under certain conditions. This section of the line is located less than 10 kilometres north of the City of Fort Saskatchewan, between the Beamer 233S substation2 and the Shell AOSP 402S substation, in the counties of Sturgeon and Strathcona.

The AESO will be filing the 138 kV Transmission Line 807L Capacity Increase NID with the Alberta Utilities Commission (AUC) on or after September 29, 2016 and requesting that the AUC approve this NID.

The AESO has posted its public notification advertisement for its NID on its website. Please <u>click here</u> to view the notification or visit the AESO website at <u>www.aeso.ca/807Lcapacityincrease</u> to see other relevant documents. The AESO's NID will be added to this website address once filed with the AUC.