



Eyre 558S Substation Interconnection Needs Identification Document

1.0 Participant Involvement Program (PIP)

Between April and June, 2010, the AESO conducted a Participant Involvement Program (PIP) to assist in preparing its Needs Identification Document (NID) to address the need for transmission reinforcement in the Lakesend area addressing the need for a new 144/6.9 kV substation within the Keystone Lakesend East Pumpstation #2 property boundary and an estimated 16 kilometers of new single circuit 138 kV transmission line.

The AESO directed transmission facility owner (TFO) AltaLink Management Limited (AltaLink) to assist the AESO in consulting on the need for this transmission development.

The AESO's PIP was designed to notify, provide information to, and as necessary, consult residents, occupants and landowners within 800 metres of the proposed development, including the following companies, organizations and municipal and provincial departments and agencies:

- Alberta Tourism, Parks and Recreation
- Alberta Ducks Unlimited Canada
- Alberta Culture and Community Spirit
- Farmers Advocate
- Fisheries and Oceans Canada
- FortisAlberta Inc.
- Alberta Environment
- Industry Canada –Central and Northern Alberta District Office
- Municipal District of Provost No. 52
- Nav Canada Aeronautical Information Services
- Alberta Sustainable Resource Development Fish and Wildlife
- Alberta Sustainable Resource Development Lands and Forests
- Alberta Sustainable Resource Development Rangeland Management
- Alberta Sustainable Resource Development Corporate Business Support Branch
- Nova Gas Transmission Ltd.
- Spartan Exploration Ltd.



- Telus Communications Inc.
- The Alberta Gas Trunk Line Co Ltd.
- Transport Canada
- Zapata Energy Corporation
- Alberta Transportation

1.1 Description of Participant Involvement Program

The AESO used a variety of methods to notify and consult stakeholders of the need for transmission development in the Lakesend area. The AESO developed a one-page Need Overview document that describes the need for transmission reinforcement in the Lakesend area, and specifically, the need for a new 144/6.9 kV substation within the Keystone Lakesend East Pumpstation #2 property boundary and an associated new single circuit 138 kV transmission line. The Need Overview explains that the primary driver of the need for transmission reinforcement in the Lakesend area is the Keystone XL Pipeline project, which will raise the demand for electricity in the area. A copy of this **AESO** document was posted to the http://www.aeso.ca/transmission/19329.html on April 16, 2010, and a copy is included as Attachment 1.

The Need Overview was also included in a mail out by AltaLink on April 29, 2010, directly addressed to stakeholders within 800 metres of the proposed development (Attachment 2). Most recently, the AESO advertised its intention to file the Eyre 558S Substation Interconnection NID in the Consort Enterprise newspaper on August 4, 2010 (Attachment 3).

To obtain stakeholder feedback, the AESO also provides stakeholders with a dedicated, toll-free telephone line (1-888-866-2959) and a dedicated email address (<u>stakeholder.relations@aeso.ca</u>). AESO contact information, along with the AESO's mailing address (2500, 330 5th Ave, SW, Calgary) and web site address (<u>www.aeso.ca</u>), and a privacy statement that describes how the AESO honours Alberta's Personal Information Protection Act, were included on all AESO communications related to this application.

1.2 Issues and Concerns Raised

The AESO has received no indication of concern from any party concerning the need for a new 144/6.9 kV substation within the Keystone Lakesend East Pump station #2 property boundary and associated new single circuit 138 kV transmission line in the Lakesend Area.





Need for transmission system reinforcement in the Lakesend area for the Keystone XL Pipeline

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

Why is transmission system reinforcement needed in the Lakesend Area?

TransCanada Corporation is developing the Keystone XL Pipeline that will provide pipeline capacity to transport oil to refining markets. The Alberta Electric System Operator (AESO) has verified the need for electric transmission system reinforcement in this area and has confirmed that electricity demand required for the Lakesend East pump station for the Keystone XL Pipeline Project in this area can be reliably met by adding a 138 kV single-circuit transmission line and a new 144/6.9 kV substation adjacent to the Lakesend East pump station (#2).

Who is the AESO?

Alberta's transmission system, sometimes referred to as the Alberta Interconnected Electric System (AIES) or "grid" is planned and operated by the Alberta Electric System Operator (AESO). The transmission system is comprised of the high-voltage lines, towers and equipment (generally 69 kV and above) that transmit electricity from generators to lower voltage systems that distribute it to cities, towns, rural areas and large industrial customers. Our job is to maintain safe, reliable and economic operation of the provincial transmission grid. Our planning responsibility includes identifying needed transmission reinforcement and recommending preferred options to meet these needs. We are regulated by the Alberta Utilities Commission (AUC) and must apply for approval of the transmission system needs we identify. Further, the AESO is also mandated to facilitate the interconnection of qualified electricity generators and new load customers to the provincial transmission grid.

The AESO intends to apply to the AUC for approval of the need identified for transmission reinforcement at the Lakesend East pump station in Q2 2010.

How are AltaLink Management Ltd. and ATCO Electric Ltd. involved?

AltaLink Management Ltd. and ATCO Electric Ltd. are the transmission facility owners (TFO) in the Lakesend area. While the AESO is responsible for determining the need for transmission system reinforcement, AltaLink Management Ltd and ATCO Electric Ltd., when directed by the AESO, is responsible for filing an application with the AUC for approval of the transmission facilities that will satisfy the transmission system reinforcement need identified by the AESO.

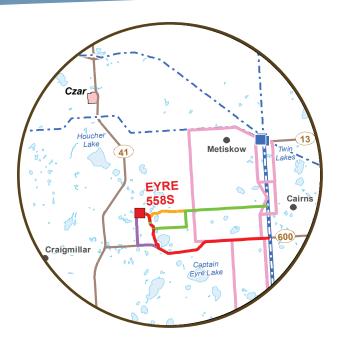
The AESO appreciates the views of stakeholders. Your comments and suggestions on the plan for transmission system reinforcement are encouraged. If you have any questions or suggestions regarding the need for transmission system reinforcement at the Lakesend East pump station or the AESO's application regarding this need, please contact:

Doug Downs
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 personal privacy in accordance with Alberta's Personal Information Protection Act. Any personal information collected by the AESO with regard to this project may be used to provide you with further information about the project, may be disclosed to the Alberta Utilities Commission (and as a result, may become public), and may also be disclosed to the local Transmission Facility Owner. If you have any questions about how the AESO will use and disclose your personal information collected with regard to this project, please contact us at 888-866-2959 or at stakeholder.relations@aeso.ca.



Proposed Eyre Substation Interconnection



Who is AltaLink?

AltaLink owns transmission facilities in the area and is consulting with you about this project. We are based in Alberta and own and operate approximately 11,800 kilometres of transmission lines and approximately 270 substations. We provide electric service to more than 85 per cent of Albertans and own the majority of the transmission system in central and southern Alberta. To find out more about AltaLink, or if you have any questions please contact us at 1-877-267-1543.

April 2010 ALTALINK

Why are you receiving this newsletter?

You are receiving this newsletter because you are a resident, occupant or landowner located near the proposed Eyre Substation Interconnection project, located in the Municipal District of Provost No.52, and we want your input.

What does this project involve?

Altalink is proposing to:

- Build a new substation
- Install a telecommunications tower within the proposed substation site
- Build approximately 15 kilometres (km) of new transmission line
- Connect the prosposed transmission line to ATCO Electric's existing transmission line

We want to provide you with:

- Project details
- A project schedule
- A map of the project area
- Information of how you can provide input

What are the project details?

New 144 kV Substation

Altalink is proposing to build a new 144 kilovolt (kV) substation, called Eyre 558S, southeast of Houcher Lake and Highway 41. The proposed substation site will be located on land owned by TransCanada Keystone Pipeline Limited Partnership and will be constructed immediately adjacent to TransCanada's Keystone XL Pipeline. Please refer to the enclosed map for further details of the location of AltaLink's proposed Eyre 558S Substation.



The proposed substation site will be 60 metres x 60 metres (197 feet) in size and will include associated equipment, such as a transformer, that reduces the voltage of electricity carried on the transmission system. It will also include a 25 metre high telecommunications tower. The substation site will be surrounded by a chain link fence and accessible through a locked gate by authorized personel only. It will be similar to the substation pictured to the left.

New 138 kV Transmission Line

AltaLink is proposing to build approximately 15 kilometres of new 138 kV single circuit transmission line. The line will be called 402L and will be built between AltaLink's proposed Eyre 558S Substation and ATCO Electric's existing transmission line, called 7L224. The line will be built with single

wooden pole structures that are approximately 20 metres (65 feet) high and will be spaced approximately 120 metres (394 feet) apart. The transmission line right-of-way (a physical strip of land required for a transmission line) will be approximately 20 metres wide. It will be similar to the transmission line pictured below.

Altalink has identified four possible routes for the proposed transmission line. These are identified as routes A1, B1, C1 and D1 on the map included with this information package. We want your input about these routes so we can select the one with the least overall impact.

Interconnection to ATCO Electric's 7L224 Transmisson Line

Altalink's proposed 402L transmission line will be connected to ATCO Electric's existing 7L224 transmission line. This connection is called a Tap and will be coordinated with ATCO Electric to allow the proposed Eyre 558S Substation to connect through ATCO Electric's 7L224 transmission line to Altalink's Hansman Lake 650S Substation. For more information about AltaLink's Hansman Lake 650S Substation, please visit www.altalink.ca/hanna.





Telecommunications Tower

As part of the proposed Eyre 558S Substation project, AltaLink will be installing a telecommunications tower. The tower will be located inside the proposed 558S substation fence. The purpose of the telecommunications tower is to support equipment that transmits data to our system control centre. It will be used by the AltaLink Control Centre for remote control operation of the electrical system, as well as private voice communications to staff on site, allowing us to monitor the safety and reliability of our electrical system.

The tower will be approximately 25 metres (80 feet) tall with a triangle base dimension of approximately two metres (6.4 feet). The telecommunications tower will be self supporting and there will be antennas attached at or near the top of the tower. It may be painted and have obstruction lighting to meet the requirements of Transport Canada. The proposed telelcommunications tower will be similar to the one pictured on the left.

For more information regarding AltaLink and this project, please contact us at:

Website: www.altalink.ca/regionalprojects

Telephone: 1-877-267-1453

E-mail: siting.consultation@altalink.ca

If you have any questions or concerns regarding the telecommunications tower please contact AltaLink within 30 days of receiving this notification.

For general information relating to antenna systems contact Industry Canada:

Website: http://strategis.ic.gc.ca/antenna

Telephone: 613-954-5031

Toll-free: 1-800-328-6189 (Canada).

Richard Hird, P.Eng., AltaLink Manager, Network Communications

Richard Hird attests that the radio installation described in this notification package will be installed and operated on an ongoing basis so as to comply with Health Canada's Safety Code 6, which defines safe levels of radio frequency, (RF), exposure. The radio system described is excluded from the environmental assessment under the Canadian Environmental Assessment Act. To ensure the structural adequacy of the tower, the design and installation will follow industry standards and sound engineering practices.

Why is this project needed?

The Alberta Electric System Operator (AESO) has determined the need to connect TransCanada's Keystone XL Pipeline to the electricity grid. The AESO has determined that AltaLink's proposed Eyre 558S Substation and 402L transmission line are required to provide this connection. For more information about the need for this project, please refer to the AESO Need Overview included with this package. The AESO is an independent, not-for-profit entity responsible for the safe, reliable and economic planning and operation of the Alberta Interconnection Electric System.

Included in this Stakeholder Information Package:

- Maps illustrating the project area and transmission line route options
- A Dialogue on Electric & Magnetic Fields
- Good Neighbours
- Public Involvement in Needs or Facilities Applications
- The Alberta Electric System Operator's Need Overview

What is the project schedule?

| April/May 2010 | Notify and consult with stakeholders |
|----------------|--|
| June 2010 | File application with Alberta Utilities Commission (AUC) |
| September 2011 | Begin project construction if approval is granted by AUC |
| March 2012 | Complete project construction |

What about Electric and Magnetic Fields (EMF)?

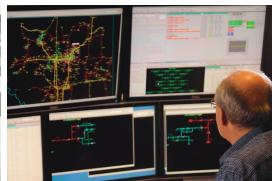
AltaLink recognizes that some people are concerned about EMF and we treat those concerns very seriously. AltaLink has experts who are available on request to measure the EMF or noise levels around your home, and ensure that all undergrounded metallic objects such as metal buildings and fences near the transmission line are properly grounded if necessary. For more information please refer to the brochure titled *A Dialogue on Electric & Magnetic Fields* included with this package.

What happens during construction?

Depending on where you are in relation to the project you may see or hear construction crews. Throughout the construction process, AltaLink and its contractors will follow all applicable Alberta Environment legislation and requirements and use appropriate techniques to protect water quality, soil, vegetation and wildlife habitat. Any noise associated with the construction and/or operation of the new facilities will comply with the Alberta Utilities Commission's (AUC) Noise Control Rule 12 and any other relevant provincial noise regulations and standards.







Who can you contact for more information?

To learn more about the proposed project you can contact:

AltaLink: 1-877-267-1453 (toll free) Email: siting.consultation@altalink.ca

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

Email: stakeholder.relations@aeso.ca

Alberta Utilities Commission (AUC): 1-780-427-4901

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

Email: utilitiesconcerns@auc.ab.ca

How can you provide input?

Your feedback is important to us and we will work with you to understand and address any questions or concerns you may have. AltaLink's representatives will contact landowners, residents and occupants near the proposed transmission line routes and substations.

We consider landowner comments in our project evaluations and summarize the input received from landowners in our Facility Application (FA). The FA describes our plans to meet technical requirements set by the AESO and provides information on routing, the environment, costs, project components and schedules, and our participant involvement program. We will submit the FA to the AUC for its approval.

The AUC is a quasi-judicial agency, established by the Alberta government that ensures the fair and responsible delivery of our utility services. We have enclosed a copy of the AUC brochure: *Public Involvement in Facility Applications*, which describes how you can be involved in the AUC process.

Thank you!

Your feedback is important to us. To learn more about AltaLink visit **www.altalink.ca**. To learn more about this project visit **www.altalink.ca/regionalprojects**, or please contact us at the information listed below:



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

Phone: 1-877-267-1453 (toll-free) Email: siting.consultation@altalink.ca

www.altalink.ca



Notification of Regulatory Filing for the proposed Eyre 558S transmission substation

The Alberta Electric System Operator (AESO) has identified a need for a new transmission substation in the Lakesend area. The AESO advises you of its intention to ask the Alberta Utilities Commission (Commission) to approve this need, in the form of a Needs Identification Document (NID) that it will file with the Commission.



The Proposed Transmission Development Area indicated on the map above shows the approximate location of the proposed reinforcement. The proposed system reinforcement involves approximately 15 kilometres of single-circuit, 144 kV (144 000 volts) transmission line and a new 144 kV transmission substation, named Eyre 558S.

The AESO and AltaLink Management Ltd. (AltaLink) presented this need to residents near the proposed site and other stakeholders between April and June 2010. The AESO has considered feedback gathered from stakeholders, and technical and cost considerations, and will apply to the Commission for approval of the need for this project. The AESO intends to file its application with the Commission, and post it on the AESO website at http://www.aeso.ca/transmission/ 21297.html, on or after August 19, 2010.

Please visit our web site, www.aeso.ca for more information, or contact the AESO at 1-888-866-2959 or stakeholder.relations@aeso.ca. In a separate application, AltaLink will apply to the Commission for approval to construct and operate the specific facilities to meet the identified need.



