

APPENDIX C AESO PIP

Sheridan 2085S Substation

Needs Identification Document

1.0 Participant Involvement Program (PIP)

From May 2016 to October 2016, the AESO conducted a Participant Involvement Program (PIP) to assist in preparing its *Sheridan 2085S Substation Needs Identification Document* (NID). The AESO directed the transmission facility owners (TFOs), in this case AltaLink Management Ltd. (AltaLink), in its capacity as general partner of AltaLink, L.P., and ATCO Electric Ltd. (ATCO), to assist the AESO in providing notification 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 (Commission) Rule 007, effective February 1, 2016.

1.1 Stakeholder Notification

The AESO's PIP was designed to notify stakeholders notified in each of the TFOs' PIPs, including but not limited to:

- i. occupants, landowners or residents;
- ii. local authorities, agencies and government which have responsibilities related to electric transmission line development;
- iii. First Nations; and
- iv. market participants

(collectively, Stakeholders).

The AESO used a variety of methods to notify Stakeholders of the need for development and the AESO's preferred option to respond to the request for system access service. The AESO developed a one-page Need Overview document that notified Stakeholders of the AESO's intention to submit the NID to the Commission. The AESO's Need Overview addressed the following items:

- a description of the need for development;
- a description of the AESO's preferred transmission development to respond to the system access service request;
- identification of the general area where facilities could be installed to implement the AESO's preferred option to respond to the system access service request; and

- AESO contact information, including telephone, email and website, for further information.

A copy of the Need Overview was posted to the AESO website at <https://www.aeso.ca/grid/projects/sheridan-2085s-substation/> on May 11, 2016 and a notice was published in the AESO Stakeholder Newsletter on May 12, 2016. Copies of the Need Overview posting and the AESO Stakeholder Newsletter notice have been included as Attachments 1 and 2, respectively.

Subsequently, an updated version of the Need Overview (Updated Need Overview) was posted on the AESO website at <https://www.aeso.ca/grid/projects/sheridan-2085s-substation/> on August 22, 2016 and a notice was published in the AESO Stakeholder Newsletter on August 23, 2016. Copies of the Updated Need Overview posting and the AESO Stakeholder Newsletter notice have been included as Attachments 3 and 4, respectively.

The Need Overview and Updated Need Overview were included in each of the TFOs' PIPs, as more fully described below.

ATCO Notification

The Need Overview was included with ATCO's project-specific information packages that were distributed to Stakeholders by mail or by email on May 3, 2016, or through engagement with ATCO's Liaisons. The notified Stakeholders included the following interested parties:

- Aboriginal Communities
 - Alexis Nakota Sioux Nation
 - Aseniwuche Winewak Nation
 - Asini Wachi Cree (Mountain Cree Band)
 - Bighorn Chiniki Stoney Nation
 - Foothills Ojibway First Nations
 - Grande Cache Local 1994
 - Horse Lake First Nation
 - Kelly Lake Cree Nation
 - Kelly Lake Metis Settlement Society
 - MNA and Metis Region 4
 - Metis Nation of British Columbia
 - Nakcowinewak Nation of Canada
 - O'Chiese First Nation
 - Paul First Nation
 - Simpcw First Nation
 - Mountain Cree (Smallboy's Camp)
 - Samson Cree Nation

- Stoney Nakoda Nations
- Sucker Creek First Nation
- Swan River First Nation
- Upper Athabasca Elders Council
- Alberta Environment and Parks
- Association for Mountain Parks Protection and Enjoyment
- Canadian Parks and Wilderness Society
- Industry Canada
- Jasper Chamber of Commerce
- Jasper Environmental Association
- Jasper Hotel Motel Association
- Marmot Basin
- Members of the Legislative Assembly
 - Eric Rosendahl
 - Jim Eglinski
- Mountain Park Lodges
- Municipality of Jasper
- Nav Canada – Land Use Department
- OCA Association
- Parks Canada Agency
- Telus Communications Inc.
- Tourism Jasper
- Transport Canada Civil Aviation/Aerodrome Safety

On May 26, 2016, ATCO hosted an information session at the Sawridge Inn and Conference Center in Jasper. The AESO's Need Overview was made available at the information session.

Between August 15, 2016 and September 19, 2016, ATCO distributed the AESO's Updated Need Overview to Stakeholders by mail or by email, or through engagement with ATCO's Liaisons. All Stakeholders who were provided with a copy of the Need Overview were provided with a copy of the Updated Need Overview.

On September 16, 2016, a copy of ATCO's information package, which includes the AESO's Need Overview, was posted on ATCO's project-specific webpage at <http://www.atcoelectric.com/Projects/ProjectPages/Jasper-Interconnection-Project>. ATCO also posted the Updated Need Overview on its project-specific webpage on September 16, 2016.

On September 16, 2016, Parks Canada posted a link on its project-specific website that links to ATCO's project-specific webpage, which includes the AESO's Need Overview and Updated Need Overview. Parks Canada's webpage can be found at <http://www.pc.gc.ca/eng/pn-np/ab/jasper/plan/ATCO.aspx>.

AltaLink Notification

The AESO's Need Overview was included with AltaLink's project-specific information packages that were distributed to Stakeholders by mail and by email between May 6, 2016 and August 3, 2016. The notified Stakeholders included the following interested parties:

- Aboriginal Communities
 - Aseiwuche Winewak Nation of Canada
 - Nakcowinewak Nation of Canada
 - Metis Nation of Alberta
 - Metis Nation of Alberta, Region 4
 - Erminskin Cree Nation
 - Gunn Metis Local 55
 - Mountain Metis (Grande Cache Metis Local 1994)
 - Paul First Nation
 - Stoney Nakoda Nations (Chiniki)
 - Mountain Cree Smallboy Camp
 - Alexis Nakoda Sioux First Nation
 - O'Chiese First Nation
 - Foothills Ojibway Society
- Yellowhead County
- Town of Hinton
- Alberta Culture and Tourism – Archeological Survey Section
- Alberta Environment and Parks (AEP) – Regional Resource Management Upper Athabasca Region
- Alberta Environment and Parks (AEP) – Regional Integrated Approvals Upper Athabasca Region (Hinton)
- Alberta Environment and Parks (AEP) – Regional Integrated Approvals Upper Athabasca Region (Edson)
- Alberta Environment and Parks (AEP) – Operations Unit Head Upper Athabasca Region (Hinton)
- Alberta Environment and Parks (AEP) – Water Act Central Region
- Alberta Environment and Parks (AEP) – Land and Resource Management Central Region
- Alberta Transportation Edson Office
- Industry Canada – Spectrum Management and Telecommunication
- Parks Canada
- Nav Canada
- FortisAlberta Inc.
- Rogers Communications
- Telus Communications

- West Fraser Mills Ltd.
- ATCO Gas & Pipelines Ltd. (South)
- Kinder Morgan Canada Inc.
- Tourmaline Oil Corp.
- Yellowhead Gas Co-Op
- Friends of Jasper Park
- Alberta Fish and Games Association
- Alberta Wilderness Association
- Ducks Unlimited Ltd.
- Canadian Parks and Wilderness Society
- Jasper Environmental Association

Between August 4, 2016 and August 31, 2016, AltaLink distributed project update packages, which included the AESO's Updated Need Overview. All Stakeholders who were provided with a copy of the Need Overview were provided with a copy of the Updated Need Overview.

On May 6, 2016, the AESO's Need Overview was posted on AltaLink's project-specific webpage at <http://www.altalink.ca/projects/view/241/atco-jasper-interconnection>. AltaLink posted the Updated Need Overview on its project-specific webpage on August 4, 2016.

Each of the TFOs' information brochures included the AESO's contact information, a description of the AESO's role, a reference to the AESO's Need Overview or Updated Need Overview, as applicable, and an invitation to contact the TFO or the AESO for additional information.

Attachment 5 includes a copy of the information brochure that was included in ATCO's project-specific information packages.

Attachment 6 includes a copy of the information brochure that was included in AltaLink's project-specific information packages. Attachment 7 includes a copy of the information brochure that was included in AltaLink's project update packages.

1.2 Filing Notification

Most recently, the AESO notified Stakeholders of its intention to submit the NID to the Commission by posting a Notice of NID Filing to the AESO website at <https://www.aeso.ca/grid/projects/sheridan-2085s-substation/> on October 5, 2016 and a notice in the AESO Stakeholder Newsletter on October 6, 2016. Copies of the Notice of

NID Filing posting and the AESO Stakeholder Newsletter notice have been included as Attachments 8 and 9, respectively.

1.3 Responding to Questions and Concerns

To ensure that Stakeholders had the opportunity to provide feedback, the AESO 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 in the Need Overview and Updated Need Overview related to this application.

As directed by the AESO, the TFOs were prepared to direct any Stakeholder questions about the need for development or the AESO's preferred option to respond to the system access service request, to the AESO.

1.4 Concerns and Objections Raised

ATCO has advised the AESO that one Stakeholder suggested an alternative option for the continued supply of electric energy to Jasper. ATCO further advised that it responded to the Stakeholder's suggestion by explaining the limitations to the suggested alternative. ATCO provided the Stakeholder with a copy of the AESO's Need Overview, and advised the Stakeholder that they could contact the AESO if they had any questions regarding the need for development or the AESO's preferred option to respond to the request for system access service. To date, the AESO has not been contacted by the Stakeholder.

The TFOs have advised the AESO that Stakeholders have not identified any concerns or objections with the need for development or the AESO's preferred option to respond to the system access service request.

ATCO has advised the AESO that Parks Canada has not received any questions or comments about the need for development or the AESO's preferred option to respond to the system access service request.

The AESO has not received any indication of concerns or objections from any party about the need for development or the AESO's preferred option to respond to the system access service request.

1.5 List of Attachments

- Attachment 1 – Need Overview
- Attachment 2 – AESO Stakeholder Newsletter Notice, Need Overview
- Attachment 3 – Updated Need Overview
- Attachment 4 – AESO Stakeholder Newsletter Notice, Updated Need Overview
- Attachment 5 – ATCO Information Brochure – *The Jasper Interconnection Project* (May 2016)
- Attachment 6 – AltaLink Information Brochure – *ATCO Jasper Interconnection* (May 2016)
- Attachment 7 – AltaLink Information Brochure – *ATCO Jasper Interconnection, Project Update* (August 2016)
- Attachment 8 – Notice of NID Filing (AESO Website Posting)
- Attachment 9 – AESO Stakeholder Newsletter Notice, NID Filing

Attachment 1 – AESO Need Overview

Need for the Sheridan 2085S substation and a new transmission line in the Jasper area



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.

ATCO Electric Ltd. (ATCO) has applied to the Alberta Electric System Operator (AESO) requesting transmission system access to serve a new and existing demand for electricity in the Jasper area. ATCO's request can be met by the following solution:

> PROPOSED SOLUTION

- Adding a new substation, to be called Sheridan 2085S, with a 69/25 kilovolt (kV) transformer, a 69 kV circuit breaker, and associated equipment
- Adding approximately 60 kilometres of 69 kV transmission line connecting the proposed Sheridan 2085S substation to the existing Watson Creek 104S substation
- Upgrading the existing Watson Creek 104S substation by adding a 138/69 kV transformer, a 138 kV circuit breaker, and associated equipment

> NEXT STEPS

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

> ATCO

- Is the transmission facility owner in Jasper National Park
- 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

> ALTALINK MANAGEMENT LTD.

- Is the transmission facility owner in the area adjacent to Jasper National Park, the area where the existing Watson Creek 104S substation is located
- 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

> 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
Jennifer Vollmer

AESO Stakeholder Relations

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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.

Attachment 2 – AESO Stakeholder Newsletter Notice, Need Overview

Sheridan 2085S Substation – Need for Transmission System Development in the Jasper area

ATCO Electric Ltd. has applied to the AESO for transmission system access to serve a new and existing demand for electricity in the Jasper area. ATCO's request can be met by the following solution:

- Adding a new substation, to be called Sheridan 2085S, with a 69/25 kilovolt (kV) transformer, a 69 kV circuit breaker, and associated equipment
- Adding approximately 60 km of 69 kV transmission line connecting the proposed Sheridan 2085S substation to the existing Watson Creek 104S substation
- Upgrading the existing Watson Creek 104S substation by adding a 138/69 kV transformer, a 138 kV circuit breaker, 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 > Sheridan 2085S Substation.

Attachment 3 – Updated Need Overview

Need for the Sheridan 2085S substation and a new transmission line in the Jasper area



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.

The Alberta Electric System Operator (AESO) has revised its proposed solution to respond to the request for transmission system access made by ATCO Electric Ltd. (ATCO) to serve a new and existing demand for electricity in the Jasper area. ATCO's request can be met by the following solution:

> NEW PROPOSED SOLUTION

- Add a new substation, to be called Sheridan 2085S, with two 69/25 kilovolt (kV) transformers, two 69 kV circuit breakers, and associated equipment.
- Add approximately 60 kilometres of 69 kV transmission line connecting the proposed Sheridan 2085S substation to the existing Watson Creek 104S substation.
- Upgrade the existing Watson Creek 104S substation by adding two 138/69 kV transformers, two 138 kV circuit breakers, and associated equipment.
- Originally, the proposed Sheridan 2085S substation was to include only one 69/25 kV transformer, one 69 kV circuit breaker, and associated equipment. Likewise, the Watson Creek 104S substation upgrade was to include only one 138/69 kV transformer, one 138 kV circuit breaker, and associated equipment.

> NEXT STEPS

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

> ATCO

- Is the transmission facility owner in Jasper National Park
- 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

> ALTALINK MANAGEMENT LTD.

- Is the transmission facility owner in the area adjacent to Jasper National Park, the area where the existing Watson Creek 104S substation is located
- 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

> 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
Jennifer Vollmer

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> 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.

Attachment 4 – AESO Stakeholder Newsletter Notice, Updated Need Overview

Sheridan 2085S Substation – Need update for Transmission System

Development in the Jasper area

The Alberta Electric System Operator (AESO) has revised its proposed solution to respond to the request for transmission system access made by ATCO Electric Ltd. (ATCO) to serve new and existing demand for electricity in the Jasper area. ATCO's request can be met by the following solution:

- Add a new substation, to be called Sheridan 2085S, with two 69/25 kilovolt (kV) transformers, two 69 kV circuit breakers, and associated equipment
- Add approximately 60 kilometres of 69 kV transmission line connecting the proposed Sheridan 2085S substation to the existing Watson Creek 104S substation
- Upgrade the existing Watson Creek 104S substation by adding two 138/69 kV transformers, two 138 kV circuit breakers, and associated equipment

Originally, the proposed Sheridan 2085S substation was to include only one 69/25 kV transformer, one 69 kV circuit breaker, and associated equipment. Likewise, the Watson Creek 104S substation upgrade was to include only one 138/69 kV transformer, one 138 kV circuit breaker, 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 > Sheridan 2085S Substation

Attachment 5 – ATCO Information Brochure – *The Jasper Interconnection Project* (May 2016)

SHAPE the conversation

May 2016



THE JASPER INTERCONNECTION PROJECT

You are receiving this newsletter because new transmission facilities are being planned in your area, and we are seeking your input on how the project may affect you. This package provides important project information and outlines our public consultation process.

Project Details

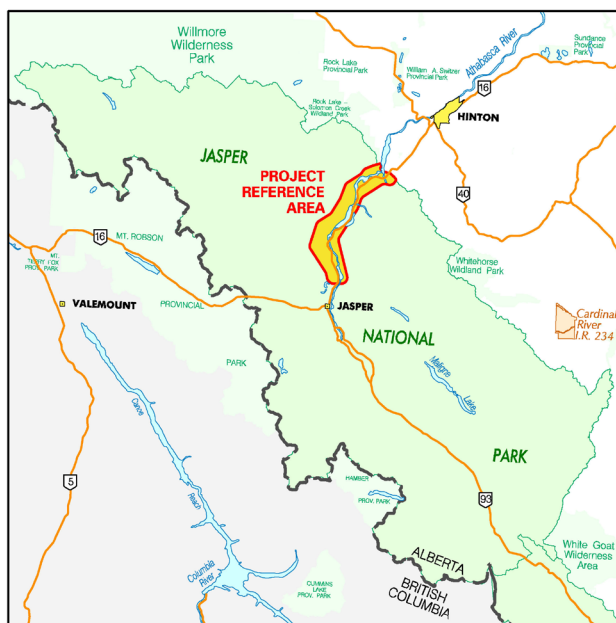
Jasper National Park's electrical distribution network is an isolated system owned and operated by ATCO Electric, a regulated utility company. Electricity for the Park and town site is produced at the 967 Palisades Power Plant, a natural gas generating station with diesel backup generators, and the 782 Astoria Generating Station. The Palisades Power Plant is the primary energy source while the Astoria Generating Station contributes a lesser amount of energy to the Park's electrical network.

The Palisades Power Plant is nearing its end of life. By 2017, much of the Plant will need to be replaced or completely refurbished. This presents an opportunity to evaluate the costs and the benefits of maintaining the Park as an isolated distribution network versus connecting it to the Alberta Interconnected Electric System (AIES). As an isolated system, localized disturbances, such as equipment failure, can have a much greater impact than if the Park was connected to the AIES.

ATCO Electric conducted a feasibility study to determine the best solution to continue providing safe and reliable electricity to the Park and residents. The study indicated that the preferred solution is to construct a transmission line into the Park connecting it to the AIES. ATCO Electric would then decommission the Palisades Power Plant.

The Jasper Interconnection Project consists of approximately 45 kilometres (km) of 69-kilovolt (kV) transmission line (called 6L530) within the Park, connected to another planned new 69-kV transmission line located outside of the Park. It also includes a planned new substation (called Sheridan 2085S) to be located within the existing Palisades Power Plant site (approximately 8 km north of the town of Jasper). The new transmission lines will connect the town of Jasper to the AIES.

Upon decommissioning the Palisades Power Plant, we will remove the equipment and perform reclamation at the site. Reclamation will involve the clean-up of materials and debris and the remediation of the Power Plant site to a state acceptable to Parks Canada.



Included in this package:

- Project Fact Sheet - The Technical Details
- Route Concept Mosaic Maps
- Site Plan
- AESO Need Overview
- AUC brochure: *Public Involvement in a Proposed Utility Development*
- Reply form and postage paid envelope



Parks Canada – Detailed Impact Analysis

ATCO Electric is preparing a type of environmental analysis known as a Detailed Impact Analysis (DIA) in support of the necessary permits and authorizations for the Jasper Interconnection Project. The DIA will comply with the Parks Canada *Directive on Impact Assessment, 2015*. Consistent with this Directive, a DIA should be completed for any proposed project that could potentially have significant adverse effects, and/or public concern with respect to ecological integrity, the

integrity of cultural resources or characteristics of the environment that are important to key visitor experience objectives.

The DIA enables Parks Canada and ATCO Electric to avoid and mitigate environmental impacts where possible.

The DIA is anticipated to be available for public review and comment in September 2016.

The Process

In developing a route option, ATCO Electric must consider a range of route constraints and barriers – including proximity to residences (see How Routes are Determined on next page). We undertake extensive studies to understand the potential impacts on wildlife, wetlands and other sensitive areas.

Additionally, consultation with landholders and interested parties routinely leads to improvements on our projects. Your feedback and input will help determine and avoid any potential negative impacts not previously identified.

We would like to meet with you to gather information about the area and answer any questions you may have. These conversations will help us to determine the best route options for the proposed transmission line development.

If you are within the vicinity of the enclosed route concept, ATCO Electric will contact you to schedule a personal consultation. Anyone who is interested in speaking with ATCO Electric on this proposed project can contact us to arrange a consultation at their convenience.

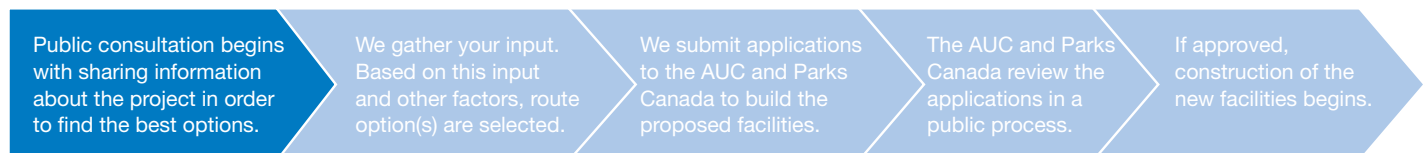
Please see our contact information

on the back of this newsletter.

In addition to the in-person and telephone consultations ATCO Electric will undertake, we invite you to provide feedback and share other information using the enclosed reply form and postage paid envelope.

If you have any questions, concerns or other information regarding this project, we want to hear from you.

THE SCHEDULE



PUBLIC CONSULTATION

is a continuous process that occurs throughout the life of the project.



How Routes Are Determined

Prior to consultation with landholders, ATCO Electric develops route concepts (see enclosed map). In selecting route concepts, ATCO Electric considers numerous constraints and barriers, including:

- Proximity to residences
- Environmentally sensitive areas
- Wetlands
- Existing infrastructure (i.e. other transmission lines, roads, highways, pipelines, telecommunication towers)
- Planned developments
- Archaeological resources
- Visual factors
- Construction & land acquisition costs
- Indigenous cultural sites
- Other valued components identified by Parks Canada

ATCO Electric's route concept will follow existing linear developments such as roads, distribution lines and pipeline corridors to the greatest extent possible. Following existing linear disturbances offers better access and straighter routes, which can reduce the amount of new clearing and ground disturbance required. This approach also provides opportunities to combine linear disturbances and share existing access roads.

The enclosed maps show the route concept. Refinements to the route may be developed in response to feedback, stakeholder consultations and ongoing studies of the project study area.

The Right-of-Way

The term right-of-way refers to the area a transmission line uses – including areas on either side of the line. Rights-of-way must have a minimum width to ensure safety and ongoing access for maintenance.

For safety reasons, some general restrictions on the use of the land in the direct vicinity of the transmission line may apply. These include setbacks for development.

Details including width and position of the right-of-way will depend on the type and size of the required structure, existing land use, surrounding features and other factors.

The typical width of the right-of-way for this project is 10 metres (m).



CONTACT INFORMATION

Your comments and concerns are important to us. Please contact us if you would like to learn more about this project or if you would like to share information with us.

**Call us toll free at:
1-855-420-5775 or contact the
project planner directly:**

Landon Bawol
Right-of-Way Planning
ATCO Electric
10035-105 Street
Edmonton, AB T5J 2V6

Email: consultation@atcoelectric.com
Website: www.atcoelectric.com
Phone: 780-420-3281
Fax: 780-420-5030
For media inquiries call: 780-691-1866

**Alberta Electric System Operator
(AESO)**
Phone: 1-888-866-2959
Email: stakeholder.relations@aesocanada.ca

Alberta Utilities Commission (AUC)
Phone: 780-427-4903
(for toll-free, dial 310-0000 first)
Email: consumer-relations@auc.ab.ca

Parks Canada
Integrated Land Use Planning and
Policy
Jasper National Park of Canada
P.O. Box 10
Jasper, AB T0E 1E0

Phone: 780-852-6142
Email: jnp-listens@pc.gc.ca



ATCO Electric – A Regulated Utility

Alberta's electrical system is regulated by the Alberta Utilities Commission (AUC). The AUC is an agency of the Province that ensures the services provided by ATCO Electric and other Alberta utilities take place in a fair and responsible manner and are in the public's interest. Before ATCO Electric can begin construction on a project, the AUC must approve the facilities application, which includes details such as the location of transmission facilities and routes. For more information, please refer to the enclosed AUC brochure entitled *Public involvement in a proposed utility development*.

The Alberta Electric System Operator

When upgrades to Alberta's electrical system are needed, they are identified by the Alberta Electric System Operator (AESO). The 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 letter, 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 ATCO Electric representative who will communicate them to the AESO on your behalf.


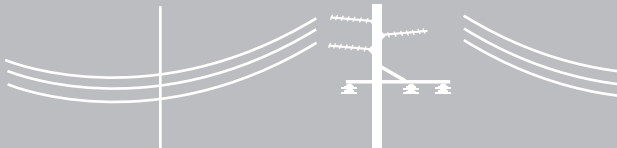

ATCO Electric

The Technical Details

May 2016

THE JASPER INTERCONNECTION PROJECT

The technical details of facilities associated with the Jasper Interconnection Project are described in this fact sheet. Designs may vary as plans are finalized.

 <p>Planned new 69-kilovolt (kV) Transmission Line</p> <p>The Jasper Interconnection project will connect to a planned new 69-kV line (called 530L) located outside of the Jasper National Park boundary.</p>	 <p>New 69-kV Transmission Line</p> <p>ATCO Electric is planning to build a new transmission line connecting transmission line 530L with the proposed Sheridan 2085S substation.</p>	 <p>New Sheridan Substation</p> <p>ATCO Electric is also planning to build the new Sheridan 2085S substation, located within the existing 967 Palisades Power Plant site in NW 2-46-1-W6M.</p>
<p>THE DETAILS</p> <p>The planned new transmission line outside of the Park boundary is owned by another Transmission Facilities Owner. This line will connect ATCO Electric transmission facilities in Jasper National Park to the Alberta Interconnected Electric System (AIES).</p>	<p>THE DETAILS</p> <p>If approved, the transmission line will be 69-kV and approximately 45 kilometres long. The line will consist of:</p> <ul style="list-style-type: none"> • Three conductor wires • Overhead shield wire • Pole mounted insulator structure <p>The typical structure is described in more detail on the back of this fact sheet.</p> <p>The proposed line will be called 6L530.</p>	<p>THE DETAILS</p> <p>The substation will include the following equipment:</p> <ul style="list-style-type: none"> • Two 69-kV circuit breakers • Two 15/20/25 MVA, 69/25 kV LTC transformers • Six 25-kV circuit breakers <p>The project will also involve the decommissioning of the existing 967 Palisades Power Plant. Decommissioning the Power Plant means we are taking it out of service. In this case, this means removing equipment and the reclamation of the site.</p>

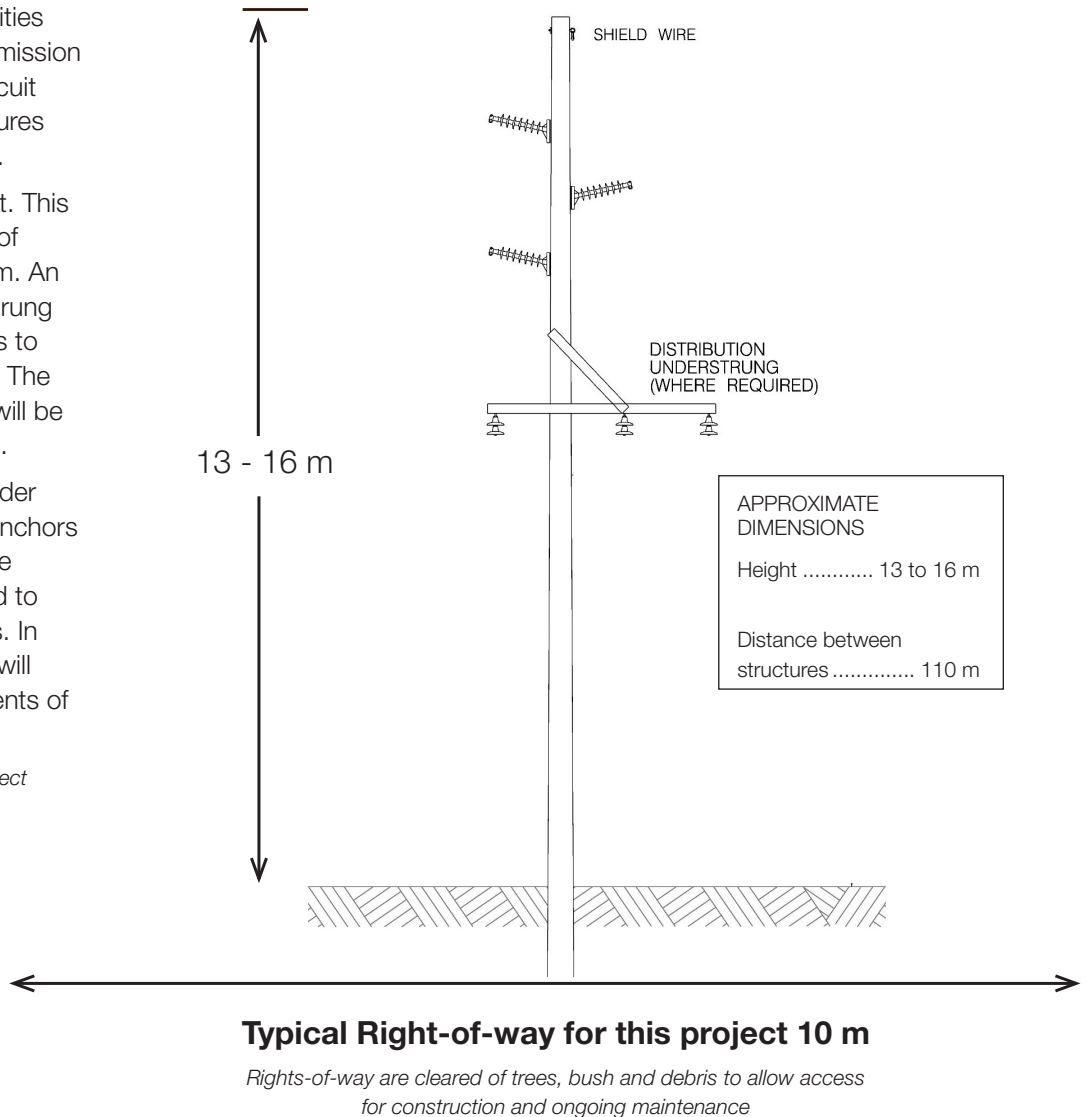
What It Will Look Like

If approved by the Alberta Utilities Commission, the 69-kV transmission line will be built with single-circuit pole mounted insulator structures similar to the one shown here.

Structures will be single-circuit. This means they will have one set of three wires strung across them. An overhead shield wire will be strung from the tops of the structures to protect the line from lightning. The distance between structures will be approximately 110 metres (m).

Non-typical structures with wider bases and/or guy wires and anchors may be required where the line ends or bends, at corners and to go over and around obstacles. In all cases minimum clearance will meet or exceed the requirements of provincial safety regulations.

Note: Details may change as the project develops and designs are finalized.



Definitions

Circuit: A circuit is a group of wires electricity flows through. ATCO Electric's transmission lines can be single or double circuit. A single circuit line has three wires and a double circuit line has six. A transmission line may also have one or two shield wires on the top of the structures to protect the line from lightning.

Circuit breaker: An automatic switch that is designed to protect an electrical circuit from overloading by shutting off the flow of electricity.

Consultation: A meeting where advice, information and views are exchanged.

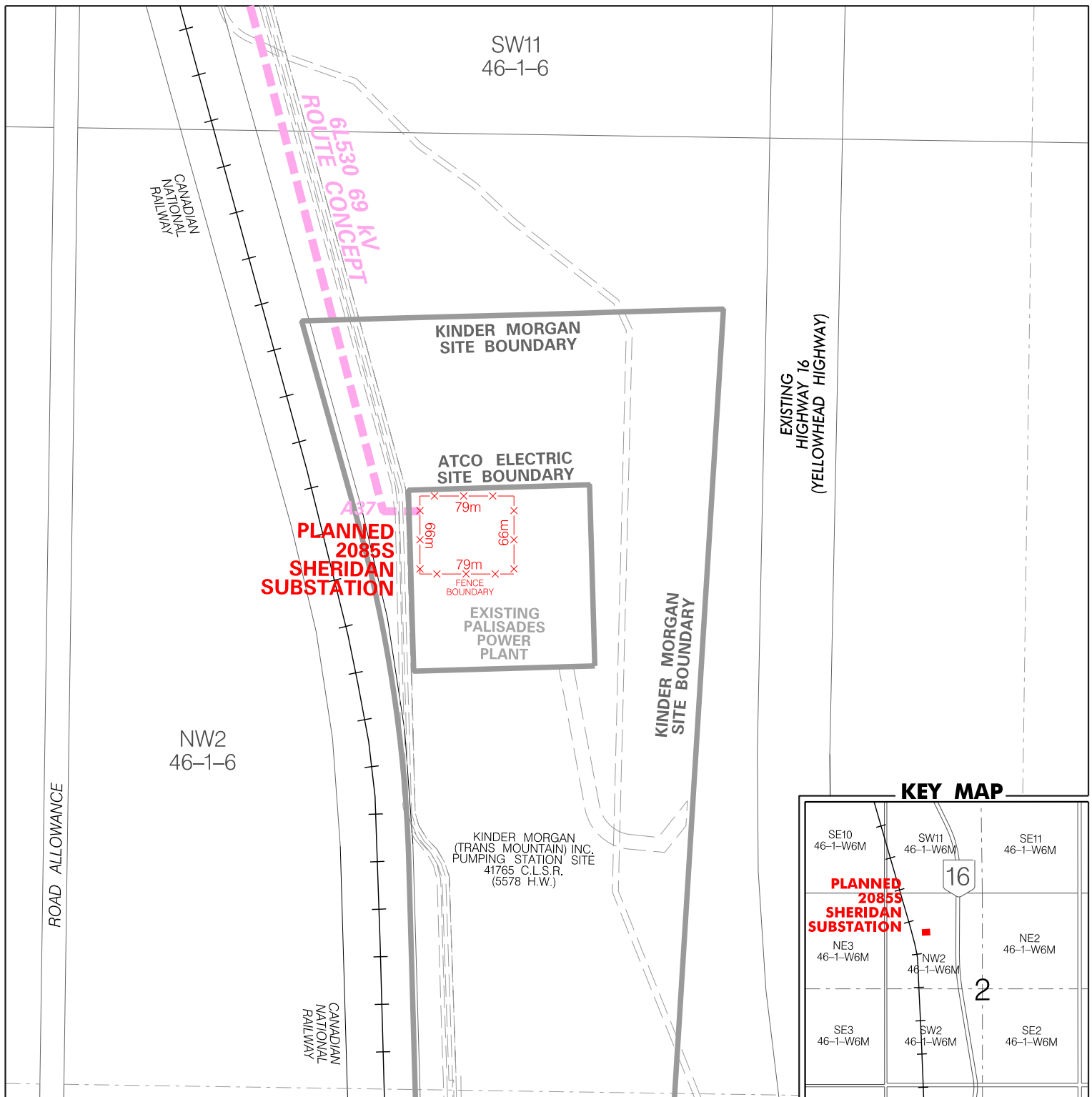
Kilovolt (kV): A kilovolt is equal to one thousand volts. This unit of measurement is most commonly used when describing transmission and distribution lines. Distribution and transmission lines in Alberta carry between 4-kV (4,000 volts) and 500-kV (500,000 volts).

Right-of-way: A right-of-way is the use of a strip of land acquired for the construction and operation of a transmission line. The term right-of-way is also used to refer to the physical space a transmission line encompasses including areas on either side of the line.

Substation: A set of equipment used to reduce high voltage power from transmission lines to lower voltages suitable for consumer use.

Termination: A termination is the point where a power line ends and connects to a substation.

Transformer: A transformer is the device in a substation that steps voltage up or down. It 'transforms' the electricity from higher transmission voltages to the lower distribution voltages that power your home.



Jasper Interconnection
Powerline Project

**2085S SHERIDAN SUBSTATION
PLANNED SITE LAYOUT**

CREDIT NOTES

Route, Substation, Building and Electrical System: ATCO 2016, Parks Base Data: Natural Resources Canada 2015

Cartographer by: GJJ

Approved by: AB

April 2016

DWG.NO. RS - 6L530 - N - 02

Attachment 6 – AltaLink Information Brochure – *ATCO Jasper Interconnection* (May 2016)

Electric system improvements near you

ATCO Jasper Interconnection

DID YOU KNOW?

A reliable transmission system keeps costs low by connecting diverse sources of power generation to the grid. The transmission system always prioritizes the lowest priced generator connected to the grid, so generators compete to provide Albertans with cost-effective electricity.

You are receiving this newsletter because you are near the ATCO Jasper Interconnection and we want your input.

AltaLink and ATCO Electric are working to connect the Jasper area to the Alberta electric system to ensure residents continue to have a reliable supply of electricity.

We are providing you with:

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

DEFINITION

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

1-877-267-1453
stakeholderrelations@altalink.ca

Visit us online at
www.altalink.ca/projects

DEFINITION

Substation

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

DEFINITION

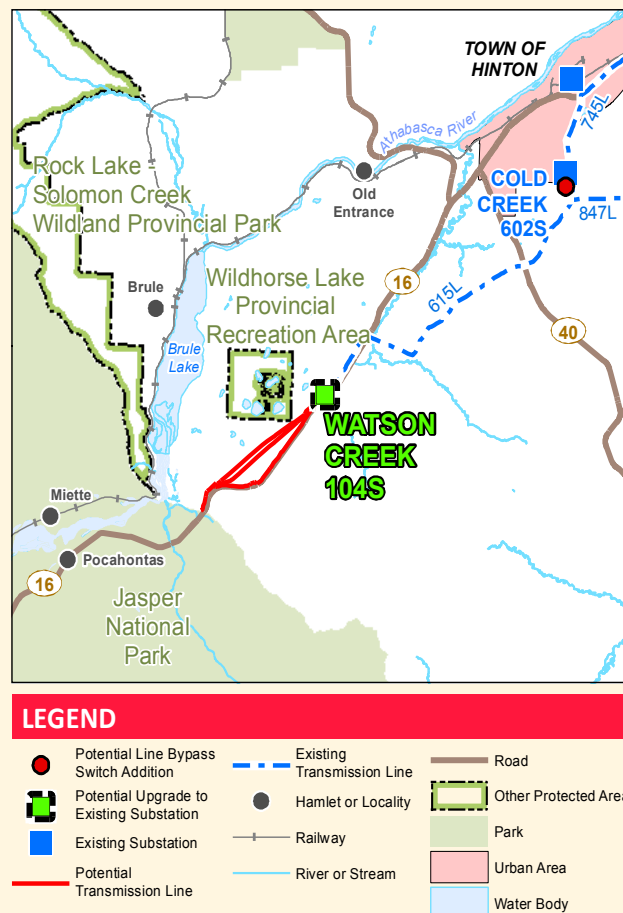
Line Bypass Switch

Line bypass switches improve the reliability of the grid by electrically bypassing failed or damaged equipment and quickly, but temporarily, restoring power to customers.

Project details

ATCO Electric and AltaLink are proposing to connect the Jasper National Park area to the electric system by connecting ATCO Electric's proposed Sheridan Substation to AltaLink's existing Watson Creek Substation. AltaLink's scope in the proposed project includes:

- constructing approximately eight to nine kilometres (five miles) of new 69 kV (kilovolt) transmission line
- expanding the existing Watson Creek Substation
- adding new equipment to the Watson Creek Substation
- modifying one existing structure at the Watson Creek Substation
- adding three new structures, one of which will support a **line bypass switch**, outside of the Cold Creek Substation



New transmission line

In this project, AltaLink will be constructing approximately eight to nine kilometres of 69 kV transmission line from the Watson Creek Substation, located 19 kilometres southwest of the Town of Hinton (in NW33-49-26-W5M) to the boundary of Jasper National Park. This new line will be named 530L.

ATCO Electric will be constructing approximately 45 kilometres of 69 kV transmission line from the boundary of Jasper National Park to ATCO's proposed Sheridan Substation. This newsletter only describes AltaLink's component of the project. For information on ATCO Electric's component, please refer to the contact information on the back page of this newsletter.

The structures on AltaLink's proposed 530L line will:

- be single-circuit
- be approximately 15 to 25 metres tall
- have an average distance of approximately 140 metres between structures
- exist in a right-of-way approximately 16 metres wide

AltaLink will also be installing optical ground wiring (also known as OPGW) on top of the new transmission line for protection and telecommunications purposes.



The structures on the proposed 530L line will look similar to the above.

Electric and Magnetic Fields

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 World Health Organization and Health Canada 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



OUR TRANSMISSION LINES TRANSPORT THE POWER YOU USE EVERY DAY

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.



How transmission line routes are selected

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

- proximity to residential areas
- electrical feasibility
- environmental features
- visual factors
- cost

Following an assessment of the project area, AltaLink has identified three potential route options for the new 530L line. In order to minimize land fragmentation and potential environmental impacts in the area, the three route options parallel existing linear developments. Please see the maps included in this package for these route options. If the project is approved, only one transmission line will be built.

Stakeholder input is an important part of our planning process. Please let us know what other factors are important to you.

Right-of-way access, workspace and easements

AltaLink has identified access trails along the proposed routes that will be used to transport equipment and materials to the construction areas. In areas where access to the sites may be limited due to difficult terrain, temporary access trails will be required.

Three temporary workspace locations have also been identified and will be used to store transmission line materials and substation equipment during construction.

Where a structure supported by guy wires is identified, additional land space may be required for guy anchors. Access trails and additional land requirements are shown on strip maps SM1, SM2, SM3, SM4 and SM5.

A Vegetation Control Easement (VCE) may be required in areas outside of the right-of-way. The VCE requirements for each line will be determined after further engineering and design.



Watson Creek Substation upgrade

To achieve a reliable connection to the electric system, the following equipment will be added to the existing Watson Creek Substation:

- two 138/69 kV transformers
- two 138 kV circuit breakers
- one 69 kV circuit breaker
- associated substation equipment

To accommodate the new equipment, AltaLink is proposing to expand the fenceline of the Watson Creek Substation by approximately 40 metres to the east and approximately 40 metres to the south onto privately-owned land. Please refer to the included DP1 map for details.

AltaLink may require modifications to one existing structure on the 615L transmission line, outside of the Watson Creek Substation, to accommodate the site expansion. The scope of this potential structure modification will be determined following further detailed engineering.

Line bypass switch addition

AltaLink will be installing one new bypass switch between transmission lines 847L and 615L, located approximately 40 metres south of the existing Cold Creek Substation and approximately two kilometres southeast of the Town of Hinton. A new structure on the existing 847L and 615L lines will also be required to connect this new bypass switch. Please refer to the included DP2 map for details.

The bypass switch will allow AltaLink to quickly restore power to the Watson Creek Substation if a power outage were to occur at the Cold Creek Substation.



Top to bottom: A typical 138/69 kV transformer, 138 kV circuit breaker, line bypass switch



Providing your input

Stakeholder input is critical to identifying the lowest overall impact solution for this project and is important to us. You can provide your input in any of the following ways.

CONTACT US DIRECTLY

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

PARTICIPATE IN A ONE-ON-ONE CONSULTATION

We will contact all occupants, residents and landowners who are on or directly adjacent to the project location 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 facilities application we submit to the Alberta Utilities Commission (AUC).



Next steps and anticipated schedule

The **Alberta Electric System Operator** determined this transmission interconnection is needed and will file a needs identification document with the AUC. After our consultation process is complete we will file a facilities application with the AUC. The AUC will review both the needs identification document 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 involvement in a proposed utility development*.

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

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.

INCLUDED IN THIS
INFORMATION
PACKAGE:

- Project maps
- AUC brochure:
*Public Involvement
in a Proposed Utility
Development*
- Need Overview



Contact us

To learn more about AltaLink's proposed ATCO Jasper Interconnection, please contact:

AltaLink

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

E-mail: stakeholderrelations@altalink.ca

Website: www.altalink.ca/projects

To learn more about the ATCO Electric's Jasper Interconnection Project, please contact:

ATCO Electric

1-855-420-5775

E-mail: consultation@ATCOElectric.com

Website: <http://www.ATCOElectric.com>

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)

E-mail: stakeholder.relations@aeso.ca

The 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. 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.

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.)

E-mail: utilitiesconcerns@auc.ab.ca



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

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.facebook.com/
altalinktransmission](https://www.facebook.com/altalinktransmission)



www.twitter.com/altalink



Attachment 7 – AltaLink Information Brochure – *ATCO Jasper Interconnection, Project Update* (August 2016)

Electric system improvements near you

ATCO Jasper Interconnection

PROJECT UPDATE

We would like to provide you with an update on our progress with the proposed ATCO Jasper Interconnection.

In May 2016, you may have received a project newsletter regarding the proposed ATCO Jasper Interconnection project. The project involves connecting ATCO Electric's proposed Sheridan Substation to AltaLink's existing Watson Creek Substation via approximately eight kilometres of 69 kilovolt (kV) **transmission** line. Details on the project can be found at:

www.altalink.ca/projects/view/241/atco-jasper-interconnection

A revised Alberta Electric System Operator (AESO) need overview is included with this update, which clarifies that both the Watson Creek and Cold Creek substations will each require two transformers and two circuit breakers.

Route A selected

After consulting with stakeholders in the area and evaluating the three route options, AltaLink has determined that the northernmost route, route A, has the lowest overall impact compared to routes B and C. Route A has been selected as the preferred route as it is situated in an existing utility corridor and parallels other linear infrastructure, minimizing overall potential environmental, residential and visual impacts. Route A was also preferred by stakeholders during consultation. Please see the included DP1 map for route details.

AltaLink intends to recommend route A in its facility application to the Alberta Utilities Commission (AUC), which it anticipates filing in the fall 2016. You will be notified when the project has been filed. Landowners on routes no longer under consideration will not receive any further project updates.

Project details

ATCO Electric and AltaLink are proposing to connect the Jasper National Park area to the electric system. AltaLink's scope in the proposed project includes:

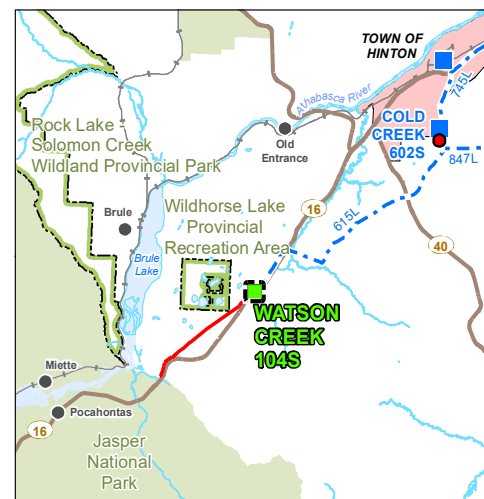
- constructing approximately eight kilometres of new 69 kV transmission line
- expanding the existing Watson Creek Substation
- adding two transformers and two circuit breakers to the Watson Creek Substation
- modifying one existing structure at the Watson Creek Substation
- adding three new structures, one of which will support a line bypass switch, outside of the Cold Creek Substation

We are proposing to construct new access roads on Kinder Morgan's property that will be used for both construction purposes and permanent access to the Substation. The new access roads are illustrated on the included FP1 map.















DEFINITIONS

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.



LEGEND

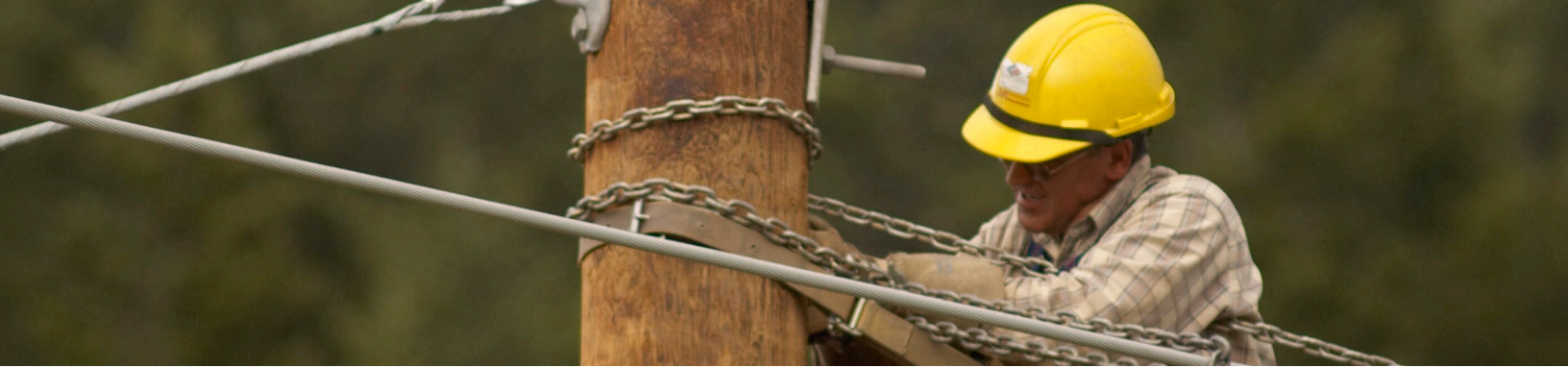
- | | | |
|---|--|--|
|  Proposed Line Bypass Switch Addition |  Existing Transmission Line |  Road |
|  Proposed Upgrade to Existing Substation |  Hamlet or Locality |  Other Protected Area |
|  Existing Substation |  Railway |  Park |
|  Preferred Transmission Line (Route A) |  River or Stream |  Urban Area |
| |  |  Water Body |

CONTACT US

1-877-269-5903

stakeholderrelations@altalink.ca

www.altalink.ca/projects



Next steps

The AESO determined this electric system upgrade is needed and will file a needs application with the AUC. Following our public consultation and notification process, we will file a facilities application with the AUC. We will inform you when we file our application with the AUC.

OUR TRANSMISSION LINES TRANSPORT THE POWER YOU USE EVERY DAY

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.

Anticipated schedule

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

Although we will 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

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

Email: stakeholderrelations@altalink.ca

Website: www.altalink.ca/projects

To learn about ATCO Electric's Jasper Interconnection Project, please contact:

ATCO Electric

1-855-420-5775

E-mail: consultation@ATCOElectric.com

Website: <http://www.ATCOElectric.com>

To learn more about the need for the project, please contact:

ALBERTA ELECTRIC SYSTEM OPERATOR (AESO)

1-888-866-2959 (toll-free)

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 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 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.

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

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.

Attachment 8 – Notice of NID Filing – *(AESO Website Posting)*

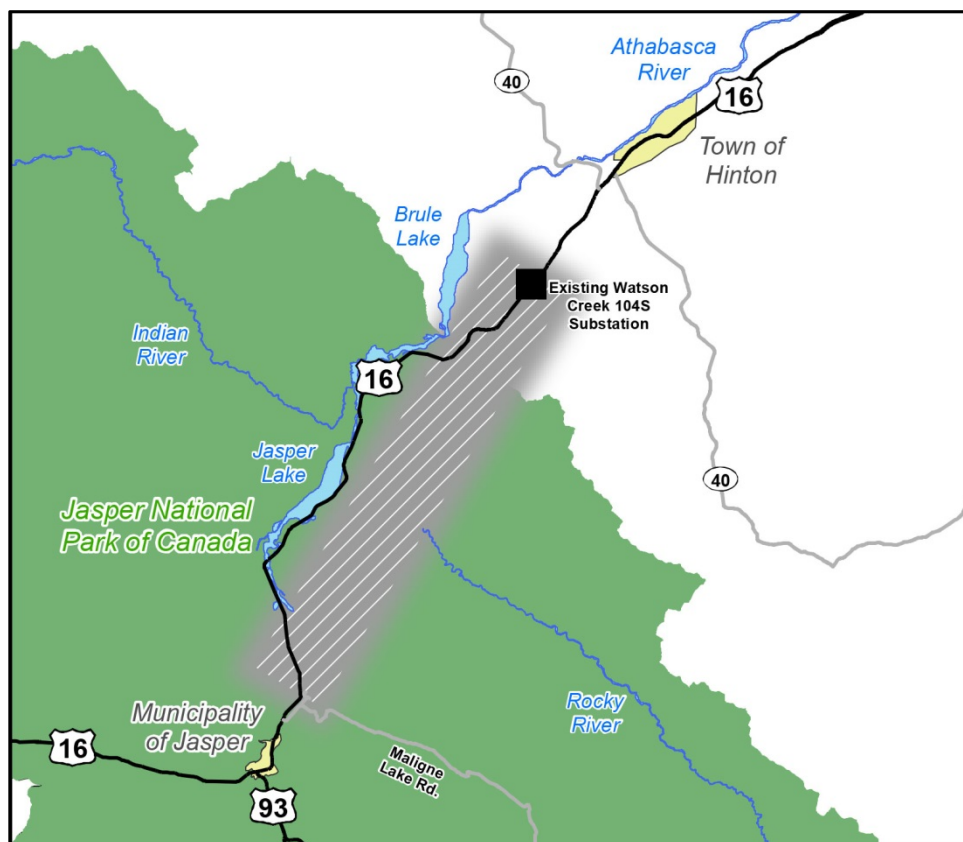
AESO Public Notification of NID Filing

Addressing the Need for the Sheridan 2085S substation in the Jasper Area

The Alberta Electric System Operator (AESO) advises you that it intends to file a Needs Identification Document (NID) for the Sheridan 2085S substation with the Alberta Utilities Commission (AUC) on or after October 21, 2016.

ATCO Electric Ltd. (ATCO) has applied to the AESO requesting transmission system access to serve a new and existing demand for electricity in the Jasper area. ATCO's request can be met by the following solution:

- Add a new substation, to be called Sheridan 2085S, with two 69/25 kilovolt (kV) transformers, two 69 kV circuit breakers, and associated equipment.
- Add approximately 60 kilometres of 69 kV transmission line connecting the proposed Sheridan 2085S substation to the existing Watson Creek 104S substation.
- Upgrade the existing Watson Creek 104S substation by adding two 138/69 kV transformers, two 138 kV circuit breakers, and associated equipment.



The black square indicates the approximate location of the existing Watson Creek 104S substation, which is at NW-33-49-26-W5. The shaded area on the map indicates the approximate location of the proposed Sheridan 2085S substation, which is at NW-2-46-1-W6, and the proposed 69 kV transmission line. ATCO Electric Ltd. (ATCO) is the transmission facility owner (TFO) in Jasper National Park, and AltaLink Management Ltd. (AltaLink) is the TFO in the area adjacent to Jasper National Park. In separate applications, called Facility Applications, ATCO and AltaLink will each describe the transmission developments and proposed locations, and will request AUC approval to construct and operate the specific transmission facilities.

The AESO, ATCO and AltaLink presented this need to stakeholders, including residents, occupants and landowners, from May 2016 to October 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 <https://www.aeso.ca/grid/projects/sheridan-2085s-substation/>

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 9 – AESO Stakeholder Newsletter Notice, NID
Filing**

Sheridan 2085S Substation – Notice of NID Filing

ATCO Electric Ltd. (ATCO) has applied to the AESO requesting transmission system access to serve new and existing demand for electricity in the Jasper area. ATCO's request can be met by the following solution:

- Add a new substation, to be called Sheridan 2085S, with two 69/25 kilovolt (kV) transformers, two 69 kV circuit breakers, and associated equipment.
- Add approximately 60 kilometres of 69 kV transmission line connecting the proposed Sheridan 2085S substation to the existing Watson Creek 104S substation.
- Upgrade the existing Watson Creek 104S substation by adding two 138/69 kV transformers, two 138 kV circuit breakers, and associated equipment.

The AESO intends to file the Sheridan 2085S Substation Needs Identification Document (NID) application with the Alberta Utilities Commission on or after October 21, 2016, requesting that the Commission 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 Grid > Projects > Sheridan 2085S Substation to see all the relevant documents, including the NID application once it is filed with the Commission.