

# ATCO

## SHAPE the conversation



June 2019

## CENTRAL EAST TRANSFER OUT TRANSMISSION PROJECT

In January 2019, ATCO Electric Ltd. (ATCO) distributed project information about the Central East Transfer Out Transmission Project to landholders in the vicinity of the planned transmission line and invited feedback on our preliminary routes. We also held a series of open houses in February for people to learn more about the Project.

Since then, we have been meeting with landholders in the vicinity of the routes under consideration.

To date, we have had over 500 conversations with landholders about the Project. We would like to thank everyone who provided their feedback.

### Routing Update

The input we received during the first round of consultation has been compiled and examined. This input has been used in combination with other available information to refine the route options and reduce the overall impact of the transmission line. An updated Reference Map showing the selected routes is enclosed.

You continue to have the opportunity to provide your input on the Project. Please contact us at **1 855 420 5775** to share your thoughts.

If you received this package in the mail, updated Route Mosaic Maps are enclosed showing the selected route options in relation to your property. Rejected options — routes no longer considered — are also shown. Selected Route Mosaic Maps for the entire length of the Project are available at [www.ATCO.com](http://www.ATCO.com) (click on “Projects”) or can be mailed to you upon request.



### Project Details

ATCO Electric Ltd. (ATCO) and AltaLink were both directed by the Alberta Electric System Operator (AESO) to develop portions of the Central East Transfer Out Transmission Project.

ATCO is proposing to add two staged 240-kilovolt transmission lines between the existing Tinchebray substation near the Village of Halkirk and the service territory boundary near the Village of Alix and the Village of Nevis. This is to reinforce and upgrade the transfer out capability of the transmission system in the central east area to the rest of Alberta's Interconnected Electric System.

ATCO will also require alterations to the existing Tinchebray 972S substation. In ATCO's service territory, the total line length will be approximately 160 kilometres (km) long.

### Next Steps

We are in the process of providing additional details on the updated selected routes and on the typical structure being considered for the Project.

Route refinements at this stage will typically involve localized adjustments to the line location in response to site-specific concerns and constraints.

For more information on route selection, please see the inside of this newsletter.

## Selected Routes

In this Project Update, you will find information on the routes selected for further consideration. The Update also contains information on the routes that have been removed from consideration. Stakeholder consultation efforts did identify a few new route segments that have been added for consideration. The routes are shown on the ATCO Reference Map. ATCO and AltaLink coordinated our selected routes at the service territory boundary to ensure alignment.

Several routes are shown on the maps, however only one route will be constructed.

**If you are not in the direct vicinity of the selected routes, you will not be contacted during our second round of personal consultations. Please check the enclosed maps to verify the location of your property in relation to the selected routes.**

**Parties on rejected routes will be removed from our project mailing list unless they request otherwise.**

## Your Input

All transmission line projects have impacts. Some can be mitigated while others cannot. Our goal is to find the location for the transmission line that will have the least overall impact, however, we recognize that there are impacts cannot be mitigated. Your input is very important when making these decisions.

The top concerns raised include:

- Agricultural operations impacts
- Following existing developments
- Visual impacts
- Proximity to residences

Additionally, concerns related to wildfires and crop diseases have also been identified.

If you have any further input to provide or require further information, please contact us.

During consultation conversations there were inquiries about an opportunity to re-use existing 9L20 transmission line structures for this Project. ATCO evaluated the existing transmission line; unfortunately, those existing structures are not able to support the additional conductor wires required for this Project.

Stakeholders also inquired if other existing substations could be considered for the eastern termination for this Project. ATCO is working with the AESO to re-assess feasibility. If a different eastern termination is considered we will update stakeholders with more information.

## Route Selection

The selected routes were chosen based on consultation feedback and combined with other available information to refine the route options in an effort to reduce potential impacts. In some locations, preliminary route options were dropped from further consideration. In other locations, new options were developed as a result of your feedback.

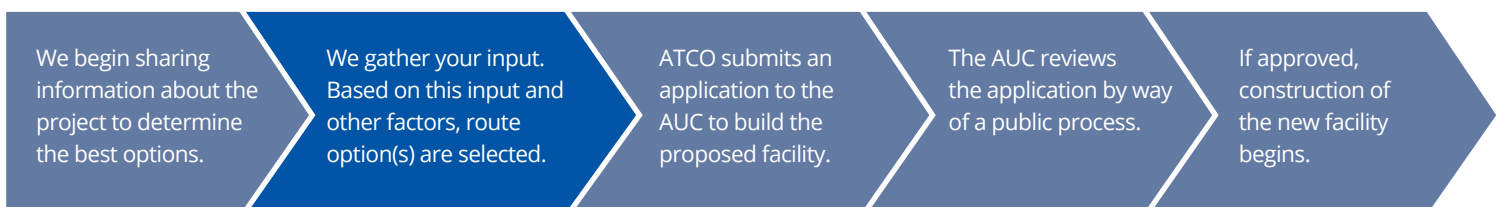
Consultation feedback is not the only factor that must be considered during the route selection process. We must also consider a range of important factors, including proximity to residences, environmentally sensitive areas, wetlands, existing infrastructure (such as other transmission lines, roads, well sites and pipelines), planned developments, agricultural operations, visual factors and construction requirements.

Whenever possible, consideration is given to routing new transmission lines along existing linear features, such as quarter section lines, roads, and other powerlines.

The consultation process for this project is ongoing. That means we have yet to determine the preferred route for the transmission line, and in some areas we may decide to propose both preferred and alternative route options to the AUC in our application. Although multiple route options may be proposed, only one route will be built.

Project updates are available at [www.ATCO.com](http://www.ATCO.com) (click on "Projects"). **Please contact us if you have questions, concerns or would like to request a personal consultation.**

## THE SCHEDULE



### PUBLIC CONSULTATION

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

## Project Update

The Alberta Electric System Operator (AESO) manages the Alberta electric system and has identified the need for this Project to enhance the reliability of the transmission system in the area. When we started consulting on this Project in January 2019, it was proposed to be staged to align with generation milestones in the area so that additional transmission capacity is built as generation targets are met. The AESO initially asked ATCO to plan for two new circuits, with one needed by 2023 and the second by 2027-2029.

We included our proposed options to meet this need in the newsletter that we mailed in January 2019. Since then, the

AESO has continued to monitor the need in the area and the possibility that generation milestones can change over time. As a result, they have now asked us to consider including two potential options in the application that we file for this Project.

Option 1 aligns with the generation milestones already identified as 2023 for the first circuit and 2027-2029 for the second circuit. Option 2 plans for the scenario that the first circuit is still needed as early as 2023 but the need for the second circuit is delayed beyond 2029. In this circumstance, the second circuit would be filed in the future as a standalone Facility Application.

	PROPOSED SOLUTION	FIRST STAGE (BY 2023)	SECOND STAGE (BY 2027-2029)
Option 1 Originally included in this project	One double circuit transmission line <b>Selected to move forward</b>	One line built but only one circuit will be energized	The second circuit will be energized
	Two single circuit transmission lines – parallel alignments <b>Removed from consideration</b>	One line built	The second line will be built on an alignment parallel to the first line
Option 2 New	One single circuit transmission line <b>New proposed option</b>	One line built	The second circuit (delayed beyond 2029) would be filed in the future as a stand-alone Facility Application

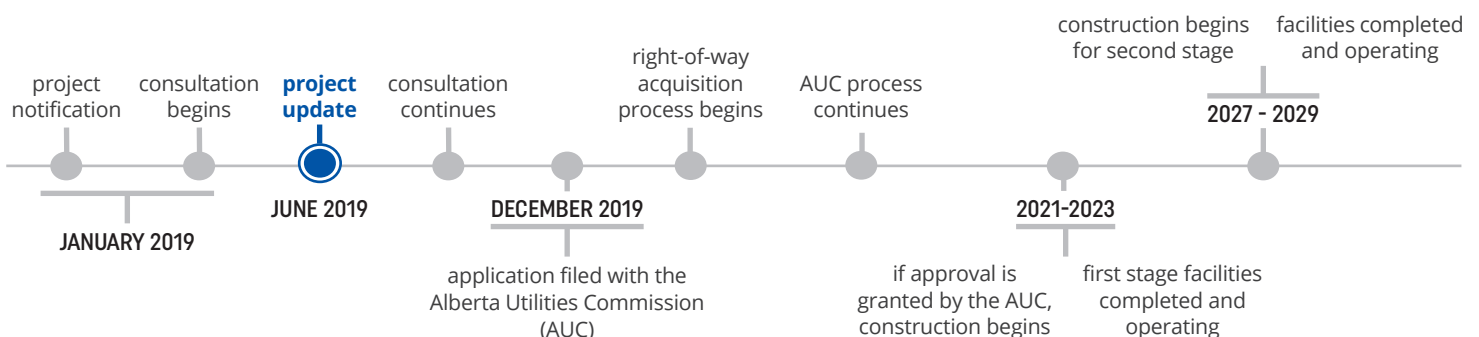
### Option 1 — Originally included in this project

Based on stakeholder feedback, engineering, field studies and a cost analysis we determined that the lowest overall impact way to meet the need for this option is with one double circuit transmission line instead of two single circuit transmission lines. When compared to the two single circuit options, the double circuit option had greater stakeholder support as it minimizes the footprint of the project and the disturbance associated with building two separate lines.

### Option 2 — New

We were able to use the information gathered so far on this Project to help us determine our proposed routes and structure types to address the first stage of this scenario. ATCO plans to use single circuit wood H-Frame structure in this scenario and would use the same proposed alignments as the double circuit structures proposed for Option 1.

On the following pages you will find details about the routes and structures proposed for each option and how you can provide your input.



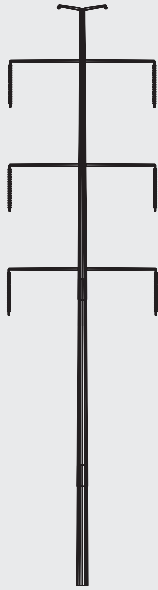
## What It Will Look Like

In the January 2019 project information, ATCO indicated that four different structures were being considered for the Project. With further assessment of the design required, we have determined that two of the structures will meet the options that AESO has requested ATCO to prepare.

The double circuit steel mono-pole structure will hold two transmission circuits. This structure will meet the current Project requirement requested by the AESO as Option 1.

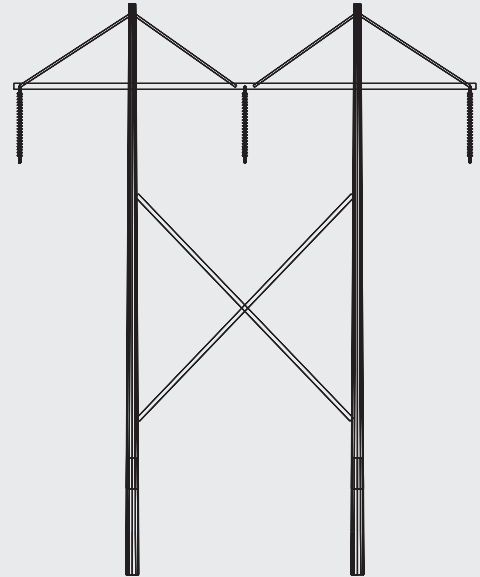
The single circuit H-frame structure will hold one transmission circuit. This structure type will meet AESO's requested Option 2.

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.



### Double Circuit Steel Mono-Pole

- Typical Structure Height 27 m
- Structure Height Range 19 to 27 m
- Typical Right-of-Way Width 24 m
- Typical Distance between Structures 200 m
- May require guy wires at corners and/or turns



### Single Circuit H-Frame Structure

- Typical Structure Height 20 m
- Structure Height Range 16 to 27 m
- Typical Right-of-Way Width 34 m
- Typical Distance between Structures 211 m
- May require guy wires at corners and/or turns

*\* Final Design may vary*

## The Right-of-Way

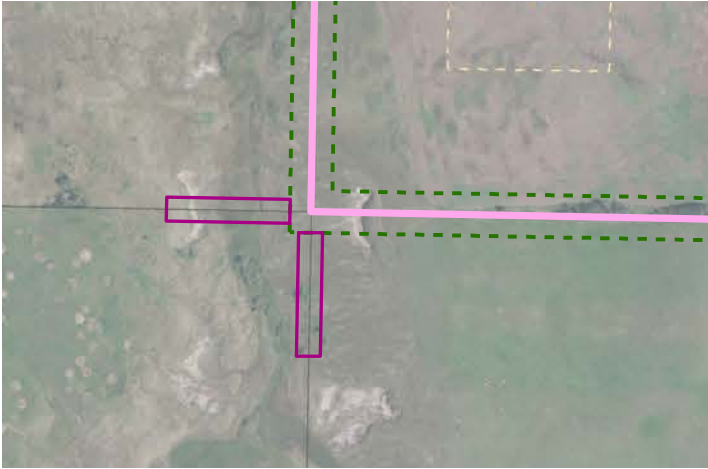
The term right-of-way refers to the area a transmission line uses including areas on either side of the line. Rights-of-way must have a minimum width to ensure safety prevent fire from falling trees and ongoing access for maintenance. For safety reasons, some general restrictions on the use of the land in the direct vicinity of the transmission line may apply. These include setbacks for development. The typical right-of-way for this Project is variable and can range from 24 m to 34 m. The right-

of-way will be slightly narrower when following a road.

Once a proposed route has been submitted to the AUC, ATCO begins obtaining agreements with landholders to acquire the right-of-way.

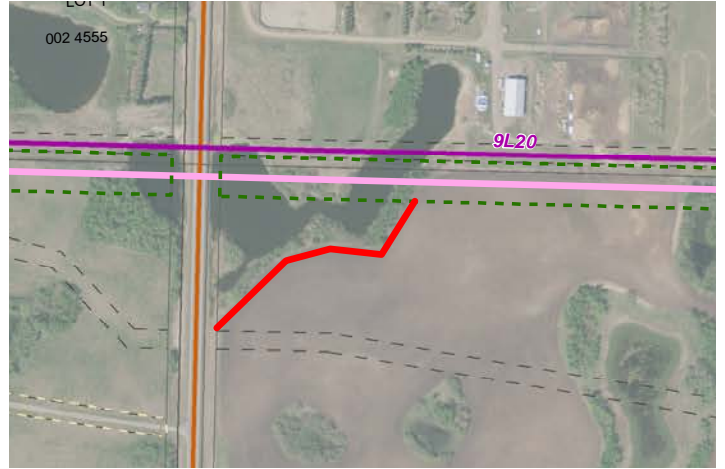
Once the transmission line is constructed, landholders may continue to use the right-of-way, subject to the terms of agreements made between the landholder and ATCO.

## Temporary Workspace



Temporary workspace may be required to accommodate the movement of equipment during construction. Temporary workspace may be developed parallel to the right-of-way in congested locations. Also at corners or locations where the line bends, additional area may be required to string the transmission line. These areas will vary in location and size.

## Access Trails



Access trails may be required in areas where terrain conditions or the presence of wetlands make driving on the right-of-way impractical. In some situations, access trails will be temporary during construction. Permanent access trails may be needed for ongoing maintenance in some areas. If required, temporary and permanent access trails will be approximately 6 to 15 metres (m) wide.

If you own or occupy land in the vicinity of these access trails and temporary workspaces then your package will also contain one or more detailed Facility Detail Maps. Arrangements for access trails and temporary workspace will be discussed and negotiated with landholders individually. Actual dimensions of these features may vary with final plans.



*Cross-country alignment with farming through the right-of-way*



*Unloading structures from trailer*

## Tinchebray Substation



ATCO is planning on altering the existing Tinchebray Substation. The substation is located approximately 13 kilometres (km) northeast of the Village of Halkirk in northeast 26-39-15 W4M.

The substation is planned to undergo the following alterations:

- Add two new 240-kV circuit breakers
- Add other minor substation equipment
- Extend the substation fence east by approximately 24 m to house the new equipment (right side of the substation in the photo)

## Maintenance and Operation of Electrical Facilities

For safe electric facilities and reliable service to customers, ATCO works diligently to maintain and operate our electrical facilities. We use multiple strategies to meet this objective, including:

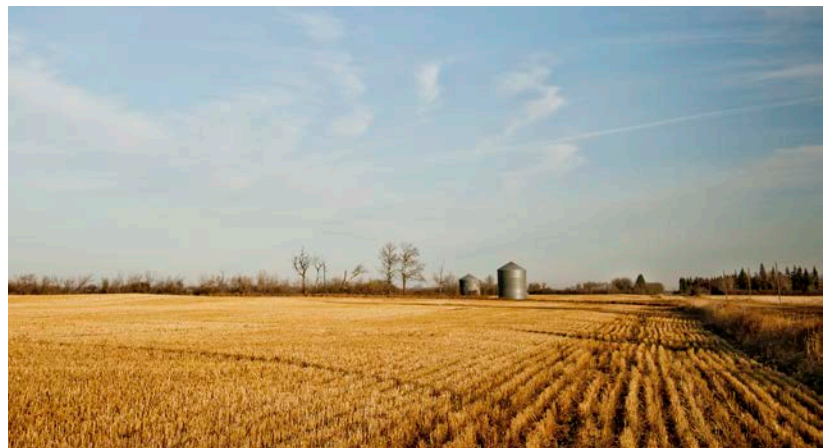
- Compiling with the Safety Codes Act, and Canadian Standards Association rules and standards
- Managing vegetation that could be in proximity to the conductor wires
- Enhancing communication systems while operating the electrical facilities
- Office throughout the service territory allowing us to have operations employees near the facilities

The electrical facilities can be affected by the environment, such as line contacts, extreme weather (wind, lightning, fire) or wildlife interactions. ATCO monitors the electrical system 24 hours a day. If there was an issue or emergency situation on or near an electrical facility, ATCO works closely with the local emergency services to address the situation that arose and restore electricity to customers as soon as possible.

## Environmental Surveys and Assessments

ATCO is undertaking environmental and wildlife surveys and assessments to understand the presence of species in the project area. ATCO has retained an environmental consultant to assist us with the environmental surveys and assessments of the current project routes. This work has started and will continue throughout 2019 and into 2020.

We are contacting landowners to discuss access to their land for the assessments.



## Open Houses

ATCO is planning two open houses to share the details on the selected routes being considered for the Project. The open houses are from **4 pm to 8 pm**.

Your feedback on the Project is important to us. We encourage you to learn more or provide your input by attending one of our open houses, visiting our website or by contacting us.

### **Halkirk — Tuesday, July 9, 2019**

Halkirk Community Hall  
111 Main Street, Halkirk

### **Stettler — Wednesday, July 10, 2019**

Stettler Community Hall  
5101 - 46 Avenue, Stettler

## LOCAL BENEFITS

Upgrading the transmission system in your area will:

- Improve access to safe, secure and reliable power
- Allow future businesses to connect to Alberta's electric system
- Encourage investment in our province

If you are a local business, and would like to be considered for the ATCO approved vendors list, please contact us toll free at **1 800 668 2248**.



## Definitions

### **Circuit**

A circuit is a group of wires electricity flows through. ATCO'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**

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

### **Consultation**

A consultation is 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.

### **Termination**

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

# 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
- Use the enclosed reply form and postage-paid envelope to share feedback or

## Landon Bawol

Environment & Land  
ATCO  
10035 - 105 Street  
Edmonton, AB T5J 2V6

Email: [consultation@ATCOelectric.com](mailto:consultation@ATCOelectric.com)

Website: [www.ATCO.com](http://www.ATCO.com)

(click on "Projects")

Fax: 780 420 5030

To learn more about AltaLink's portion of the Central East Transfer Out Project please contact:

## AltaLink Management Ltd. (AltaLink)

Phone: 1 877 267 1453 (toll free)

Email: [stakeholderrelations@altalink.ca](mailto:stakeholderrelations@altalink.ca)

Website: [www.altalink.ca/projects](http://www.altalink.ca/projects)

To learn more about AESO's portion of the Central East Transfer Out project, please contact:

## Alberta Electric System Operator (AESO)

Phone: 1 888 866 2959

Email: [stakeholder.relations@aeso.ca](mailto:stakeholder.relations@aeso.ca)

Website: [www.aeso.ca/grid/projects](http://www.aeso.ca/grid/projects)

## Alberta Utilities Commission (AUC)

Phone: 780 427 4903

(for toll-free, dial 310 0000 first)

Email: [consumer-relations@auc.ab.ca](mailto:consumer-relations@auc.ab.ca)

Website: [www.auc.ab.ca](http://www.auc.ab.ca)

# ATCO

## Alberta Electric System Operator

The AESO plans and operates Alberta's electricity grid and wholesale electricity market safely, reliably and in the public interest of all Albertans. They are a not-for-profit organization with no financial interest or investment of any kind in the power industry. 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 ATCO representative who will collect your personal information for the purpose of addressing your questions and/or concerns to the AESO. This process may include disclosure of your personal information to the AESO.

The AESO's Need Overview for the Central East Transfer Out Transmission Development can be found online at: [www.aeso.ca/grid/projects](http://www.aeso.ca/grid/projects)

## Approval Process

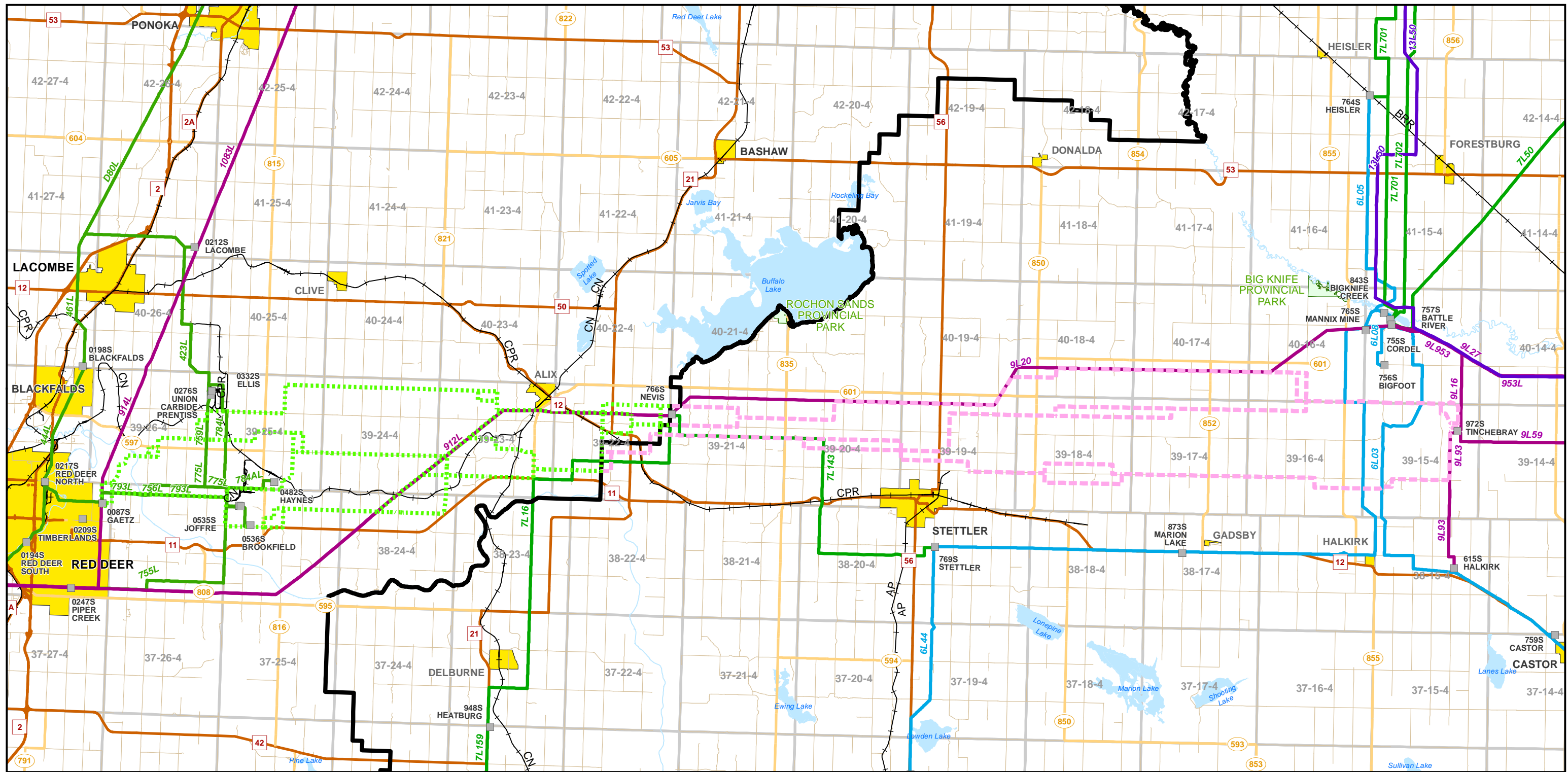
Alberta's electrical system is regulated by the Alberta Utilities Commission (AUC), an independent agency of the province that ensures the fair and responsible delivery of utility services. Before ATCO can begin construction on this project, the AUC must approve the facility application, which includes details such as location of electric transmission facilities and proposed alterations. For more information about how you can participate in the AUC approval process, please refer to the enclosed AUC brochure, *Public Involvement in a Proposed Utility Development*.

If you are affected by the route(s) in our application, information you shared with us will be summarized in our facility application to the AUC. The AUC will consider this input in its review of the application.

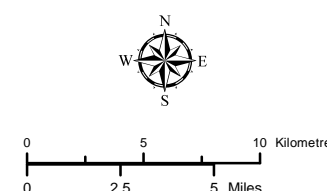
### Included in this package:

- **Reference Map** — reflects the entire project area
- **ATCO Reference Map** — to reflect ATCO portion of the project area
- **Selected Route Mosaic Maps** — maps are included to your specific land or area interests
- **Facility Detail Maps** — these maps provide additional detail to your land interest
- **AUC Brochure:** *Public Involvement in a Proposed Utility Development*
- Reply form and postage-paid envelope





- - - AltaLink 240 kV Transmission Line Selected Routes
- - - ATCO 240 kV Transmission Line Selected Routes
- AltaLink / ATCO Service Territory Boundary
- Existing Substation
- Existing 500 kV Transmission Line
- Existing 240 kV Transmission Line
- Existing 138 kV / 144 kV Transmission Line
- Existing 72 kV Transmission Line
- +— Railway
- Primary Highway
- Secondary Highway
- Road
- City/ Town/ Village
- Provincial Park
- Waterbody
- Watercourse



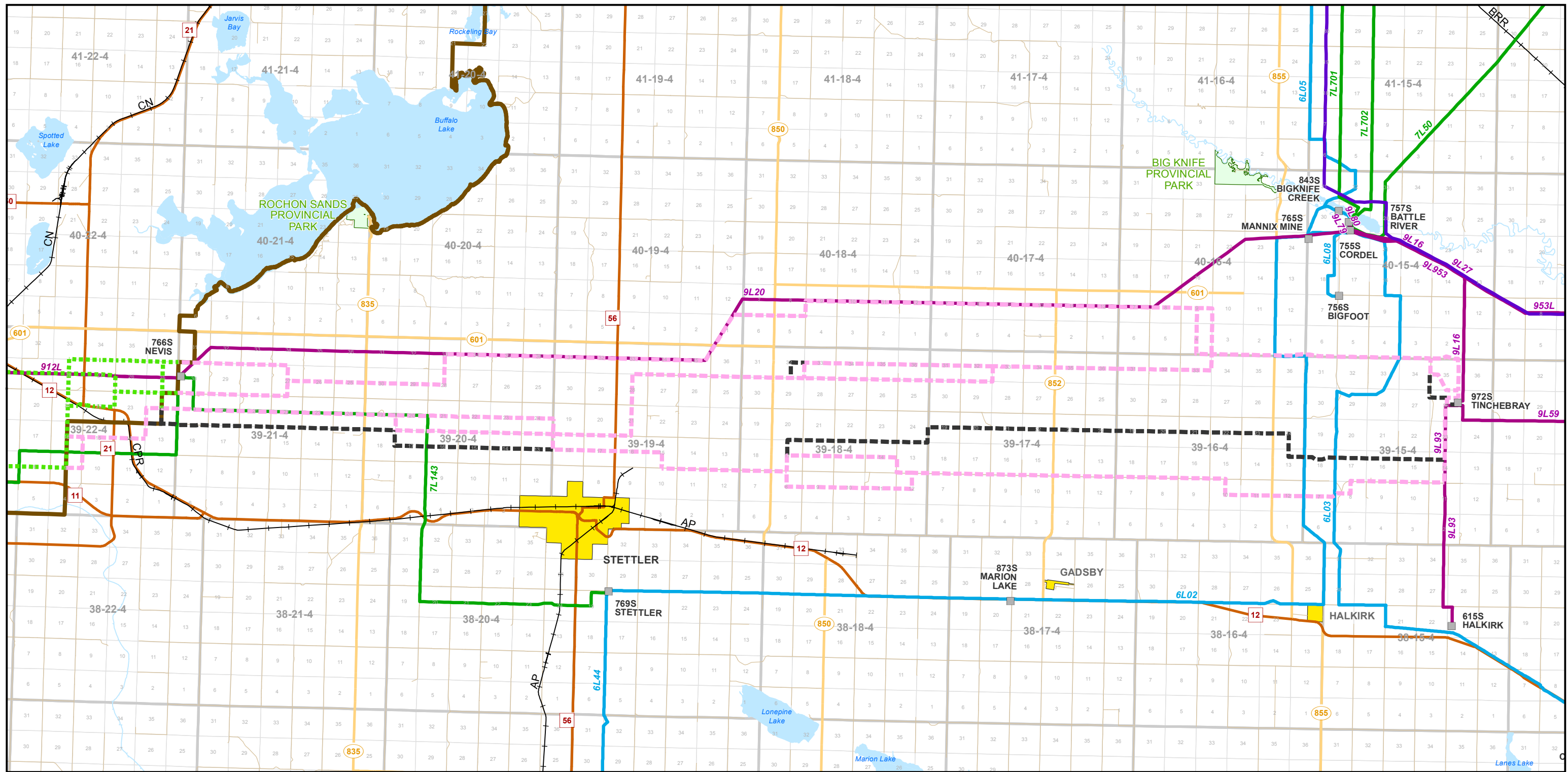
NOTES:  
 - Only facilities in the vicinity of the project are shown.  
 - Several routes are shown, but only one will be built.

This map is the property of AltaLink & ATCO. This map is not intended to be used in place of Alberta One Call.  
 Always practice extreme caution when near power lines!

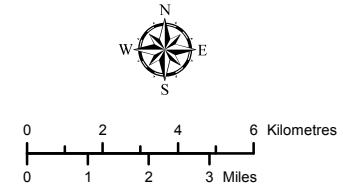


Central East Transfer Out Project  
 OVERVIEW REFERENCE MAP  
 UPDATE

June 2019  
 RS-CETO - N2 - 01



- AltaLink 240 kV Transmission Line Selected Routes
- ATCO 240 kV Transmission Line Selected Routes
- ATCO Rejected Routes
- AltaLink / ATCO Service Territory Boundary
- Existing Substation
- Existing 500 kV Transmission Line
- Existing 240 kV Transmission Line
- Existing 138 kV / 144 kV Transmission Line
- Existing 72 kV Transmission Line
- +— Railway
- Primary Highway
- Secondary Highway
- Road
- City/ Town/ Village
- Provincial Park
- Waterbody
- Watercourse



**NOTES:**  
 - Only facilities in the vicinity of the project are shown.  
 - Several routes are shown, but only one will be built.

This map is the property of ATCO. This map is not intended to be used in place of Alberta One Call.  
 Always practice extreme caution when near power lines!



**Central East Transfer Out Project**  
**ATCO REFERENCE MAP**

June 2019  
 RS-CETO - N2 - 02



# SHAPE THE CONVERSATION

## CENTRAL EAST TRANSFER OUT TRANSMISSION PROJECT

### REPLY FORM

10035 - 105 Street, Edmonton, Alberta, T5J 2V6

#### CONTACT INFORMATION

Date (DD/MM/YYYY): \_\_\_\_\_

First Name: \_\_\_\_\_

Last Name: \_\_\_\_\_

Company/Organization Name (if applicable):  
\_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Home Phone: \_\_\_\_\_

Cell Phone: \_\_\_\_\_

Business Phone: \_\_\_\_\_

Email: \_\_\_\_\_

#### **Please help us identify new contacts**

You were contacted about this project because ATCO identified you or your company/organization as having a land interest in the vicinity of the project. Is there anyone else associated with your property, such as other owners, renters or occupants, who we should also contact? If so, please provide the name(s), contact information and their land interest.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I would like to receive all future correspondence about this project by Email (If this is your preference, please check the box)

**AN IMPORTANT MESSAGE ABOUT PRIVACY:** *The information on this form is being collected to identify concerns with proposed changes to and/or the siting of power transmission facilities, and to comply with the Alberta Utilities Commission (AUC) rules regarding the submission of transmission facilities applications. This information may be provided to electric facility owners, Alberta's Surface Rights Board, and the Alberta Electric System Operator. Your comments and personal information may also be publicly accessible through the AUC website, should it be submitted to the AUC as part of a transmission facility application – subject to Alberta's Freedom of Information and Protection of Privacy Act. **If you wish to keep your information confidential, you must make a request to the AUC (403-592-4376).** If you have questions or concerns about your information or how it may be used or disclosed as part of this process, please contact us (see contact information below).*

**Please let us know by checking a box below if either statement applies to you:**

I do not have concerns with the Project based on the information provided

I have concerns with the Project based on the information provided

**Please share any comments or concerns that you have about the Project:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**HOW TO SUBMIT:** Please use the enclosed envelope to return by mail or fax to 780-420-5030. If you would like more information about the project, please contact us toll free 1-855-420-5775 or by Email: [consultation@atcoelectric.com](mailto:consultation@atcoelectric.com).