

October 2019

PROJECT UPDATE

Transmission line routes and structures



Central East Transfer-Out Project

Thank you for your ongoing participation in the Central East Transfer-Out Project. We began consulting with stakeholders on this proposed project in January 2019. Throughout our consultation process we've received valuable feedback that we have incorporated into our project planning.

With the input we've received from stakeholders, along with information gathered through ongoing field studies and engineering, we have identified preferred and alternate transmission line routes and the proposed structure types that we will include in the application that we file for this project.

If you are only near a removed route, you will no longer receive information from us about this project. Please contact us if you have any questions or wish to stay informed. You can also continue to receive updates by subscribing on our website at www.altalink.ca/projects.

Please refer to the maps included with this newsletter to help you identify routes near your property.

AltaLink's portion of the proposed Central East Transfer-Out Project is located in the counties of Red Deer, Lacombe and Stettler.

If approved, the project involves:

- Approximately 55-60 kilometres of new 240 kilovolt (kV) transmission line connecting the Gaetz Substation, located east of the City of Red Deer, to a new ATCO Electric transmission line, located southeast of the Village of Alix.
- Installing new equipment at the Gaetz Substation.

ATCO Electric is also planning a portion of the project in its service area. You may receive information from ATCO Electric if that portion of the proposed project is near you. Please see the back of this newsletter for ATCO Electric's contact information if you have questions regarding their portion of the project.

You are receiving this newsletter because you are near the proposed Central East Transfer-Out Project, and we want to provide you with a project update.

Updated transmission line routes

AltaLink has identified a preferred route, alternate route segments, and local route variants for its portion of the Central East Transfer-Out Project. The routes and their designation points are shown on the Detailed Photo Map (DP1) included in this package.

PREFERRED ROUTE

AltaLink's preferred route:

- parallels our existing transmission line (called 912L) for approximately 17 km
- parallels Township Road 392 for approximately 12 km, where adjacent residences are generally set back farther from the road or are on the opposite side of the road allowance
- has approximately 9 km located in other road allowances, minimizing impacts to existing land uses
- has low residential impacts

ALTERNATE ROUTE SEGMENTS

AltaLink has identified three alternate route segments that can be used with portions of the preferred route.

From A105 to C50

- Parallel's Highway 11 for approximately 8km
- Allows AltaLink to connect to ATCO Electric's southern most route option

From D25 to F70

- Uses a combination of road allowance and quarter line
- Low residential impact, however it has a longer line length and greater potential environmental impact than the preferred route

From B5 to C31

- Parallels existing 138 kV transmission lines and road allowance for approximately 16 km
- Minimizes fragmentation of the landscape

LOCAL ROUTE VARIANTS

These short segments of line offer alternative options to the preferred route and the locations where we can connect to ATCO Electric.

From E5 to E11

- exits the existing Gaetz 87S substation to the west
- parallels existing transmission lines north across Township Road 390
- turns on a quarter line to join the preferred route
- avoids two residences located along Range Road 270

From C80 to C90

- located mainly on quarter lines and connects with ATCO Electric at the service territory boundary
- has fewer residences within 150 metres than the preferred route in this area
- allows AltaLink to connect to ATCO Electric's northern most route option

From B99 to B101

- located on a property boundary, minimizing impacts to land uses
- allows AltaLink to connect its preferred route to ATCO Electric's southern most route option

ROUTES REMOVED FROM CONSIDERATION

AltaLink has removed several route segments from further consideration. A description of the routes that have been removed is included below. The designation points listed for each can be seen on the DP1 and DB1 maps included in this package.

B15-A45-A50-A60-A70-B60-A85: This route was mainly located on private lands, and would have greater agricultural impacts compared to a route that travels north from B15 past the Joffre Petrochemical Plant.

D60-D65-B75-B70: This route segment is located in an area with more wetlands and greater potential environmental impacts than the Alternate Route to the south. Additionally, this route would have been longer and require more angle structures than the Alternate Route.

Updated structure types

There are two potential options proposed for this project - a single circuit option and a double circuit option. Monopole structures (shown to the right) have been selected for the majority of the proposed routes for both options.

Based on further engineering, we have determined that additional structure types may be required in specific areas:

- Some structures adjacent to the crossing of the Red Deer River will need to be multi-pole structures (two and three pole structures)
- If the double circuit option is selected, two pole structures will be needed at angles and corners

The additional structure types are shown on the structure insert included in this package. The location of these structures can be seen on the Strip Mosaic maps included in this package. One set of maps shows the structure locations for the single circuit option, the other shows structure locations for the double circuit option.

These structures will be approximately the same height as the monopole structures that have already been identified. The double circuit two pole structures require the same right-of-way width, but will have two poles instead of one. The right-of-way for the other multi pole structures is site specific and can be identified on the maps.



Top: Single circuit monopole
Bottom: Double circuit monopole

Rebuilding existing transmission lines

During the first round of consultation, some stakeholders suggested rebuilding transmission lines between the Gaetz Substation and the NOVA Joffre plant to accommodate the new lines required for this project. AltaLink committed to updating stakeholders on our evaluation of this option.

We determined that rebuilding existing lines in the current location to accommodate the new lines for this project does not represent a low overall impact solution and we will not be proposing this as part of our facility application to the Alberta Utilities Commission (AUC). The reasons for this are:

Outage constraints: Although these lines could be rebuilt to accommodate the new lines, the length of time the existing lines can be out of service is limited to certain times of the year to ensure the reliability of the system in the area. This constraint would increase the construction duration of the project as well as the cost.

Structure limitations: To accommodate both the existing lines and the new lines, the structures would be required to be larger with larger foundations than the current structures or the other structures that are proposed for this project. The larger structures will not be able to fit within the road allowance where the existing lines are currently located or within the existing right-of-way, depending on the alignment considered. The additional structure size would not only increase the overall cost of the project, but it may limit the ability to locate the structures along the existing alignments, eliminating the potential benefit of co-locating the lines.

Cost: The age of the existing lines range from 20 to 30 years which is generally in the middle of their expected life. Salvaging the existing lines to consolidate and build new structures would result in the removal of structures that can still be used for several more years. The additional cost of the new structures combined with the cost of removing lines that are not near the end of their lifespan increases the overall cost of the project.

RIGHT-OF-WAY AND WORKSPACE UPDATES

We have identified that a wider right-of-way is required in the vicinity of the crossing of the Red Deer River. Please see the included Strip Mosaic Maps for more detail.

During the second round of consultation, we communicated that a 30 m wide right-of-way would be required on some portions of routes paralleling the existing 912L transmission line. We can now confirm that in these locations only 22 metres of right-of-way is required, although the spacing from the existing 912L does not change.

Based on field work completed over the summer, AltaLink has identified some additional access trails and areas of workspace required for the construction of the potential transmission line. These areas are shown on the Strip Mosaic Maps included with your package. AltaLink may also use the right-of-way of existing transmission lines for access and workspace during construction, to minimize impacts.

NEXT STEPS

The Alberta Electric System Operator (AESO) has determined that this transmission system development is needed and will file a Need Application with the Alberta Utilities Commission (AUC).

After our consultation process is complete we will file a Facilities Application with the AUC that includes our proposed options to meet the need identified in each scenario.

The AUC will review both the Need Application 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*.

ANTICIPATED PROJECT SCHEDULE

Notify and consult with stakeholders

January to October 2019

File application with Alberta Utilities Commission (AUC)

December 2019

Start construction if project is approved

Winter 2021

Complete construction on

2023 (first circuit); 2027-2029 (second circuit – if needed)

The anticipated project schedule is in accordance with current projections from the AESO. Although we attempt to follow the anticipated project schedule it is subject to change. We will continue to provide you with updated schedule information if required as the project progresses.

CONTACT US

To learn more about the proposed Central East Transfer-Out Project, please contact:

ALTALINK

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

stakeholderrelations@altalink.ca

To learn more about the application and review process, please contact:

ALBERTA UTILITIES COMMISSION (AUC)

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

utilitiesconcerns@auc.ab.ca

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)

stakeholder.relations@aeso.ca

A copy of the AESO's Need Overview for the Central East Transfer-Out Transmission Development can be found here:
www.aeso.ca/grid/projects

To learn more about ATCO Electric's portion of the project, please contact:

ATCO ELECTRIC

1-855-420-5775 (toll-free)

consultation@atcoelectric.com

INCLUDED IN THIS INFORMATION PACKAGE:

- Project maps
- Additional structure types insert
- AUC brochure:
Public involvement in a proposed utility development

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