CLOVER BAR INTERCONNECTION PROJECT UPDATE

JUNE 2022

We are sending you this Project Update to inform you on the next phase of the proposed above-ground transmission line project – the Clover Bar Interconnection Project (the Project).

Over the last few months, we have discussed the Project with landowners, occupants, industry and interest holders of properties within the Project area as well as general stakeholders, asking for feedback on route options and potential impacts. **Thank you to everyone who shared your comments with us.**

PROJECT BACKGROUND

To support Air Products' proposed new net-zero hydrogen production facility, EPCOR is proposing to construct a new 240 kilovolt (kV) single circuit, above-ground transmission line from the existing EPCOR-owned Clover Bar Substation to a proposed new substation which will be owned and operated by Air Products.

The new transmission line will connect the proposed Air Products' substation to the electrical system.

EPCOR's proposed Project includes:

- Constructing approximately four and a half kilometres of above-ground 240 kV transmission line from the existing Clover Bar Substation (1515 - 130 Avenue) to a proposed customer-owned substation within the Air Products' site located in the Clover Bar Area, south of Aurum Road (13004 - 33 Street);
- Adding two new 240 kV circuit breakers, associated switches and equipment within the existing Clover Bar Substation fence line.

PREFERRED AND ALTERNATE TRANSMISSION LINE ROUTE OPTIONS

Based on the feedback received and research we have completed, EPCOR has identified a preferred and alternate route for the above ground transmission line that provides the lowest overall impact. Both routes will be presented to the Alberta Utilities Commission (AUC) for their consideration.

The AUC is an independent quasi-judicial agency responsible for approving power transmission facilities in Alberta. EPCOR will submit a Facility Application to the AUC to build and operate the new facilities. If approved, the AUC will also select which route will be constructed.

Route Evaluation

Determining the route of a new transmission line is a complex process. EPCOR considered a number of important factors when evaluating possible routes, including:

- Residential
- Environmental
- Electrical
- Cost
- Visual
- Special Constraints
- Existing Infrastructure

The route options utilized the transportation utility corridor (TUC) and followed existing roadways and underground utilities. After receiving input during the consultation program and considering all the above referenced factors, we have selected **Route C as the preferred route option and Route A as the alternate route.** Route C was determined to best meet the technical requirements for the Project while also having the lowest overall impacts when compared to the other route options. Since the February 2022 project notice, EPCOR has made a minor adjustment to the proposed Route C previously described to you. This adjustment moves the proposed route alignment approximately 250 metres (m) further east along Aurum Road and then heads south towards the Air Products facility. Please see the route options map below for the proposed revised route alignment.

Route B has been removed from consideration due to stakeholder feedback, cost, and impacts to existing utilities.

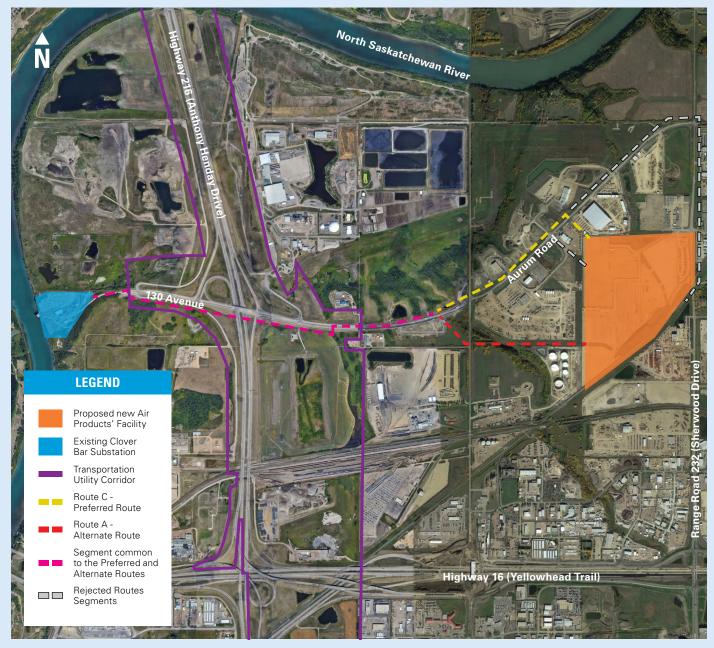
STAKEHOLDER INPUT

Throughout our discussions with stakeholders, various concerns and questions were brought forward. The feedback gathered during the consultation process was documented and will be included in the Facility Application filed with the AUC.

Common project concerns included:

- Routing preferences and line location
- Line height and access
- Structure placement
- Third-party agreements and AC mitigation studies

PREFERRED AND ALTERNATE ROUTE OPTIONS MAP



Other concerns included construction impacts, electromagnetic fields (EMF), club root, overhead versus underground lines, property value and infrastructure development.

Routing Preferences and Line Location

Some stakeholders preferred the proposed transmission line to run on the south side of Aurum Road. After exploring this possibility, it was determined that the segment of the line within the TUC can follow the south side of Aurum Road, however, the line will be sited on the north side of Aurum Road outside of the TUC to avoid pre-existing underground constraints.

Line Height and Access

If approved, the line will be constructed to meet safety codes, AUC requirements, as well as, Provincial and Federal Transport requirements. The line is expected to have wire clearance of 8.5 m at the lowest height (sag) of the line. Equipment heights provided to EPCOR during consultation confirmed access should not be an issue for these stakeholders.

Structure Placement

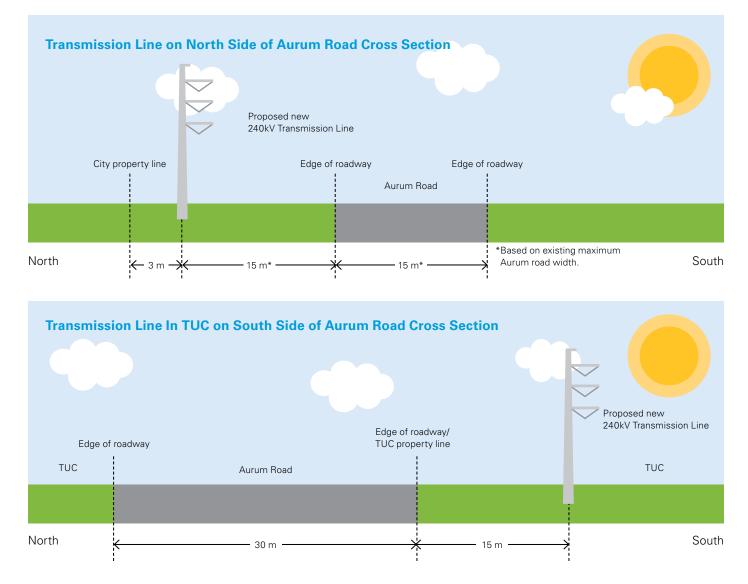
Based on current technical requirements for the preferred route, no structures are currently proposed on private property other than the parcel directly adjacent to the Air Products proposed facility and the parcel the proposed facility is located on. We will contact landowners if structure placement is required on additional private property. If you have specific questions, regarding structure placement near your property, please contact EPCOR Consultation.

Third-Party Agreements and AC Mitigation Studies

EPCOR will ensure all required third-party permits and agreements are in place prior to construction along the approved route. Once a route is approved by the AUC, an AC Mitigation Study will be conducted and provided to stakeholders directly impacted by the new transmission infrastructure, if required.

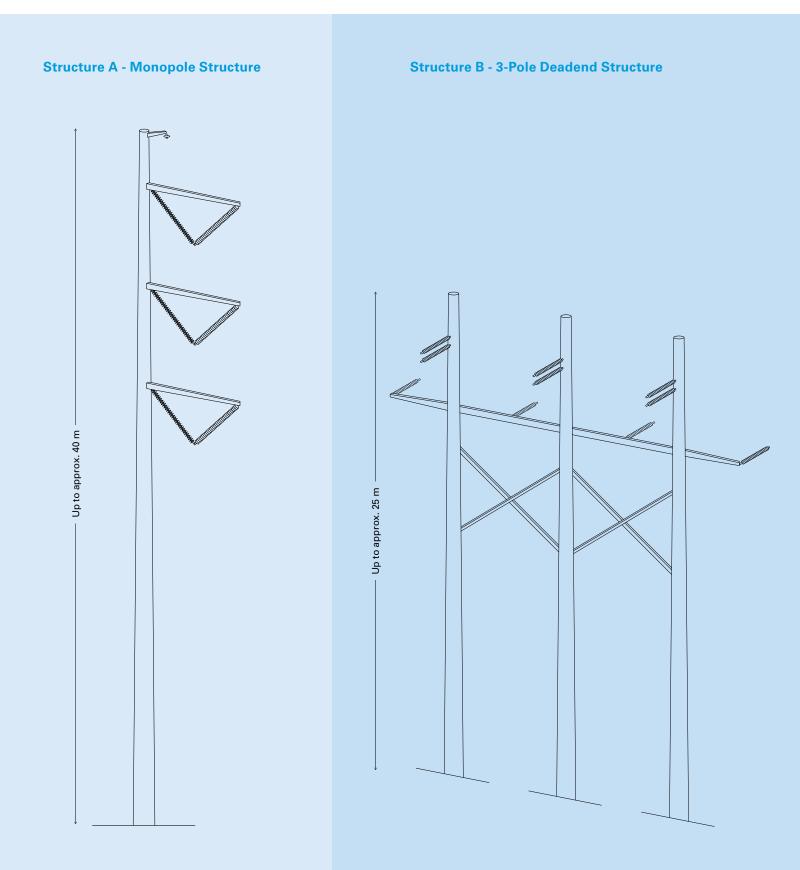
AURUM ROAD CROSS SECTION

The cross section image below shows what the proposed transmission line will look like along Aurum Road in relation to the existing roadway and property lines. *Images are not to scale and include a typical Monopole Structure.*

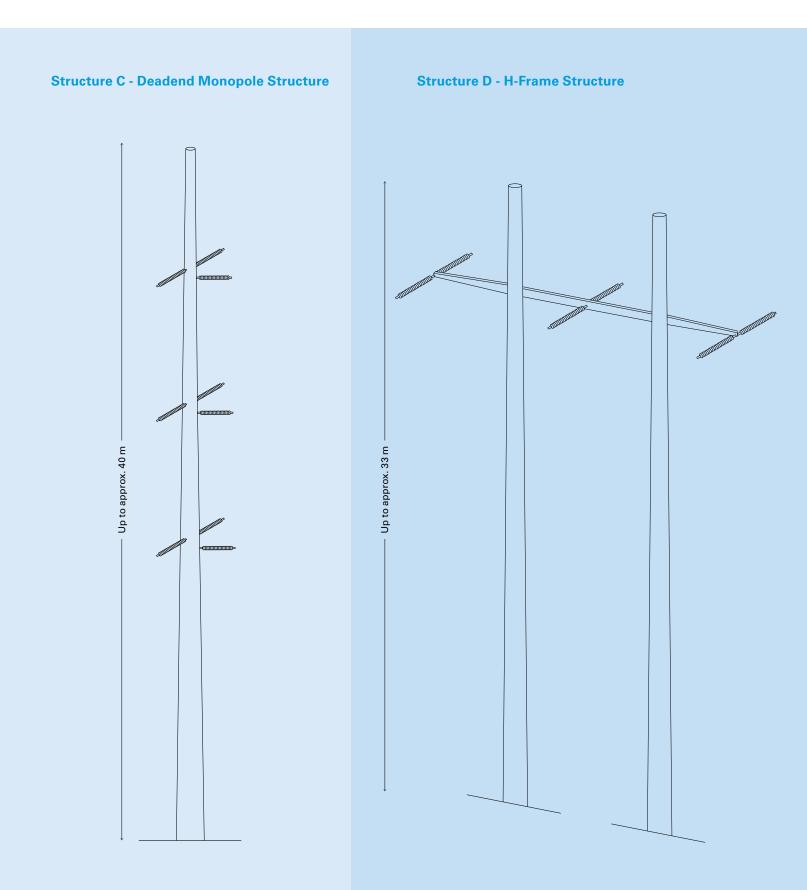


Proposed Structure Type

As shown below, the typical structures will be steel or composite monopoles, ranging in height from approximately 35 m to 40 m. The poles will be single circuit, meaning they will have three wires strung across them and one overhead shield wire on top (refer to Structure A below).



H-frames or structures with wider bases may be installed where the line turns corners, has to span larger distances or has to cross existing infrastructure (transmission lines, roads or highways. These structures may be steel or composite and range in height from approximately 23 m to 40 m (refer to Structures B, C and D). The diameter of all structures at the ground surface will range between approximately 1.4 m to 2.5 m.



DEFINITIONS

Transmission Lines and Substations

Transmission lines are like highways, moving high-voltage electricity from generating stations to substations, which are distribution points where the high-voltage electricity gets stepped down to lower voltages and sent to multiple customers.

Circuit Breaker

A circuit breaker is an electrical switch designed to protect an electrical circuit from damage caused by overload or short circuit. Its basic function is to detect a fault condition and interrupt current flow.

Transportation Utility Corridor (TUC)

The Government of Alberta established Restricted Development Areas (RDAs) in the mid-1970s. The lands in these areas are reserved for TUC uses. The intended primary uses within TUCs are linear transportation and utility facilities, which includes power transmission lines. Stakeholders along the rejected route will be removed from the Project contact list and will no longer receive project information. If you are not directly adjacent to the proposed project but would like to continue to receive project notices, please email <u>consultation@epcor.com</u> or sign up through the Project webpage at <u>epcor.com/consultation</u>. Alternatively, regular updates on the Project can be found at <u>epcor.com/consultation</u>.

In this package, you will also find:

- the AESO Need Overview
- the AUC brochure: Participating in the AUC's independent review process

PROPOSED SCHEDULE



If you have additional feedback you would like included in the Facility Application to the AUC, please contact EPCOR Consultation at <u>consultation@epcor.com</u> by **July 8, 2022**.

THE REGULATORY PROCESS

The Alberta Electric System Operator (AESO) is responsible for determining the need for the proposed project. The AESO will submit a Needs Identification Document (NID) with the AUC late summer in support of this project.

In late summer, EPCOR's project team will submit a Facility Application to the AUC outlining the proposed project and the preferred and alternate route for the new 240 kV transmission line. Stakeholders can still provide feedback about this project to both EPCOR and the AUC while our Facility Application is being considered.

The AUC must approve the Needs Identification Document and the Facility Application before construction for the project can begin. The final decision on routing will be made by the AUC and although two routes were proposed, only one route will be built if approvals are granted.

ABOUT 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 package, or visit www.aeso.ca. If you have any questions or concerns about the need for this project or the proposed transmission development to meet the need, you may contact the AESO directly.

You can also make your questions or concerns known to an EPCOR 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.

Alberta Electric System Operator (AESO)

Phone: 1-888-866-2959 Email: <u>stakeholder.relations@aeso.ca</u> Website: <u>www.aeso.ca</u>

ABOUT THE ALBERTA UTILITIES COMMISSION (AUC)

Alberta's electrical system is regulated by the AUC. The AUC is an independent quasi-judicial agency that ensures that the delivery of Alberta's utility services takes place in a manner that is fair, responsible and in the public interest. The AUC must approve this project before EPCOR can begin work. For more information about how you can participate in the regulatory process, please refer to the enclosed AUC brochure, *Participating in the AUC's independent review process*, or visit the AUC website: www.auc.ab.ca

Contact the AUC

Toll-free: 1-833-511-4282 Phone: 310-4282 Website: www.auc.ab.ca

WE WOULD LIKE YOUR INPUT

Contact us

EPCOR believes in listening to and engaging stakeholders. Community input and involvement is an important part of our decision-making. We believe in working towards solutions together and consulting with the public on initiatives. If you have any questions or would like to provide input on the Project, please contact us:

Call: 780-412-4040 Email: <u>consultation@epcor.com</u> Website: <u>epcor.com/consultation</u>

If you would like to learn more about the new Air Products' substation project, please contact Air Products at:

Call: 403-836-6495 Email: LAYTEP@airproducts.com Website: https://www.airproducts.com/campaigns/ alberta-net-zero-hydrogen-complex

Air Products, who will own and operate the new facility, is completing consultation for the planned new substation located on their property.

