

1. Introduction

From October 2021 to September 2022, the AESO conducted a Participant Involvement Program (PIP) regarding the *Saddlebrook Solar and Storage Project Connection*. The AESO directed the legal owner of transmission facilities (TFO), in this case AltaLink Management Ltd., (AltaLink) in its capacity as general partner of AltaLink L.P., to assist the AESO in providing notification as part of the AESO's PIP.

The AESO's PIP is designed to notify Stakeholders and Indigenous groups in the area where the AESO has reasonably determined that facilities could be installed to implement the AESO's preferred option to respond to the request for system access service.

The AESO's PIP has been conducted in accordance with the requirements of Section 7.1.2, NID12 and Appendix A2 of the current Alberta Utilities Commission (Commission) Rule 007 (AUC Rule 007), effective April 25, 2022.

2. Stakeholder Notification

The AESO developed a one-page AESO Need Overview document with the purpose of notifying Stakeholders of the following items:

- a description of the need for development;
- a description of the AESO's preferred option 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;
- the AESO's contact information, including telephone, email and website, for further information; and
- the AESO's next steps.

A copy of the Need Overview was posted to the AESO website at <https://www.aeso.ca/grid/projects/saddlebrook-solar-and-storage-project-connection-2334/> and a notice was published in the AESO Stakeholder Newsletter on October 28, 2021. Copies of the Need Overview posting and the AESO Stakeholder Newsletter notice have been included as Attachments 1 and 2, respectively. The Need Overview was also included with the TFO's project-specific information package that was distributed to Stakeholders, as further described in Section 2.1.

2.1 Stakeholders Notified in the TFO's PIP

The TFO has advised the AESO that its PIP included notification within 800 metres of the proposed transmission lines and the proposed right-of-way boundary as recommended by the Commission in Appendix A1 of AUC Rule 007.¹

The TFO notified a total of approximately 25 Stakeholders, of which 11 were classified as private or individual landowners. The TFO determined that notification of Indigenous groups was not required. The other 14 notified Stakeholders are listed below:

¹ AltaLink has identified its facility application to be of the type: *Overhead transmission line and new substation development – rural or industrial setting*, as categorized in AUC Rule 007, Appendix A1, Section 5.

- Alberta Culture, Multiculturalism and Status of Women
- Alberta Environment and Parks
- Alberta Transportation
- ATCO Gas and Pipelines Ltd.
- CP Rail
- Dynegy Canada Inc.
- Foothills County
- FortisAlberta Inc.
- Lexin Resources Ltd. c/o MNP Ltd.
- LR Processing Ltd. c/o MNP Ltd.
- NAV Canada
- TC Energy Ltd.
- Telus Inc.
- Transport Canada

Attachment 3 includes the TFO's project letter, which was included with the AESO Need Overview that was distributed to the Stakeholders described above on October 27, 2021. The TFO's project letter included the AESO's contact information, a reference to the AESO Need Overview, and an invitation to contact the TFO or the AESO for additional information.

3. Stakeholders Notified by the AESO

The AESO also notified 5 market participants that the AESO determined may have an interest in the Project. The AESO identified that, under certain potential system conditions, these market participants may be affected following the connection of the Saddlebrook Solar and Storage Project. A Market Participant Notification Letter, which included the AESO Need Overview, was sent to the notified market participants on December 1, 2021.

The 5 notified market participants are:

- Capital Power Limited Partnership
- East Strathmore Solar Project Inc
- ENMAX Cavalier LP
- TC Energy Ltd
- TIU Canada Ukraine Holdco Ltd

A generic version of the Market Participant Notification Letter was posted to the AESO website on December 2, 2021 at <https://www.aeso.ca/grid/projects/saddlebrook-solar-and-storage-project-connection-2334/>. A copy has been included as Attachment 4.

4. Notification of ANAP Consideration

Most recently, the AESO notified Stakeholders of its intention to consider the need for the *Saddlebrook Solar and Storage Project Connection* to be approved under the AESO's Abbreviated Needs Approval Process, (ANAP) by posting a Notification of ANAP Consideration to the AESO website at <https://www.aeso.ca/grid/projects/saddlebrook-solar-and-storage-project-connection-2334/> and a publishing notice in the AESO Stakeholder Newsletter on September 1, 2022. Copies of the Notification of ANAP Consideration posting and the AESO Stakeholder Newsletter notice have been included as Attachments 5 and 6, respectively.

5. Responding to Questions and Concerns

To ensure that Stakeholders had the opportunity to provide feedback, the AESO provided Stakeholders with AESO contact information, including a dedicated, toll-free telephone line (1-888-866-2959) and a dedicated email address (stakeholder.relations@aeso.ca). The AESO Need Overview included this 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.

As directed by the AESO, the TFO was prepared to direct any Stakeholder questions addressed to the AESO, or questions regarding the AESO Need Overview, to the AESO.

6. Concerns and Objections Raised

One Stakeholder that received the AESO's Market Participant Notification Letter raised questions and concerns related to how its operations may be affected following the connection of the Saddlebrook Solar and Storage Project Connection. The AESO responded to the Stakeholder by providing information about the following:

- how the Stakeholder's operations might be affected following the connection of the Saddlebrook Solar and Storage Project Connection;
- how remedial action schemes (RAS's) and the *Real Time Transmission Constraint Management* (TCM) Rule apply to the Stakeholder's operations;
- the rationale for the AESO's market participant notification letter;
- the AESO's approach to planning the Alberta interconnected electric system (AIES); and
- the timing and content of the AESO's forthcoming Notice of ANAP consideration posting.

The TFO has advised the AESO that none of the Stakeholders notified by the TFO identified any concerns or objections regarding the AESO's preferred option to respond to the system access service request or the need for development. The AESO has not received any indication of concerns or objections about the AESO's preferred option to respond to the system access service request or the need for development.

Apart from the inquiry above from the one Stakeholder, the AESO has not received any indication of concerns or objections about the AESO's preferred option to respond to the system access service request or the need for development.

7. List of Attachments

- Attachment 1 – AESO Need Overview (October 2021)
- Attachment 2 – AESO Stakeholder Newsletter Need Overview Notice (October 28, 2021)
- Attachment 3 – TFO's Project Newsletter (October 27, 2021)
- Attachment 4 – AESO Market Participant Notification Letter (December 1, 2021)
- Attachment 5 - AESO Public Notification of ANAP Consideration Posting (September 2022)
- Attachment 6 – AESO Stakeholder Newsletter Notice of ANAP Consideration (September 1, 2022)

Attachment 1 – AESO Need Overview (October 2021)

Need for the Saddlebrook Solar and Storage Project Connection in the Town of High River area

TransCanada Energy Ltd. (TCE) has applied to the Alberta Electric System Operator (AESO) for transmission system access to connect its proposed Saddlebrook Solar and Storage Project (Facility) in the Town of High River area. TCE's request can be met by the following solution:

PROPOSED SOLUTION

- Add one 138 kilovolt (kV) transmission line to connect the Facility to the existing 138 kV transmission line 727AL in a T-tap configuration.
- Add or modify associated equipment as required for the above transmission developments.

NEXT STEPS

- The AESO intends to apply to the Alberta Utilities Commission (AUC) for approval of the need in early-2022.
- The AESO's needs identification document (NID) application will be available on the AESO's website at www.aeso.ca/grid/projects 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.

ALTALINK

- Is the transmission facility owner in the Town of High River area.
- Is responsible for detailed siting and routing, constructing, operating and maintaining the transmission facilities.
- Is regulated by the AUC and must apply to the AUC for approval of its transmission facilities applications.

WHO IS THE AESO?

The Alberta Electric System Operator (AESO) plans and operates Alberta's electricity grid and wholesale electricity market safely, reliably and in the public interest of all Albertans. We are a not-for-profit organization with no financial interest or investment of any kind in the power industry.

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.

CONTACT US

Alberta Electric System Operator

AESO Stakeholder Relations
stakeholder.relations@aeso.ca
1-888-866-2959

2500, 330-5th Avenue SW
Calgary, AB T2P 0L4
Phone: 403-539-2450

www.aeso.ca | [@theaeso](https://twitter.com/theaeso)

Attachment 2 – AESO Stakeholder Newsletter Need Overview Notice (October 28, 2021)

October 28, 2021

AESO Stakeholder Newsletter

GRID

Saddlebrook Solar and Storage Project Connection – Need for Transmission Development in the Town of High River area

TransCanada Energy Ltd. (TCE) has applied to the Alberta Electric System Operator (AESO) for transmission system access to connect its proposed Saddlebrook Solar and Storage Project (Facility) in the Town of High River area. TCE's request can be met by the following solution:

- Add one 138 kilovolt (kV) transmission line to connect the Facility to the existing 138 kV transmission line 727AL in a T-tap configuration.
- Add or modify associated equipment as required for the above transmission developments.

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 Grid > Projects > Saddlebrook Solar and Storage Project Connection.

Attachment 3 – TFO’s Project Update Letter (October 27, 2021)

Electric system improvements near you

TC Energy Saddlebrook Solar and Battery Storage Connection

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.

You are receiving this newsletter because you are near the TC Energy Saddlebrook Solar and Battery Connection and we want your input.

TC Energy is proposing to build a new **substation** as part of their Saddlebrook Solar and Battery Storage Connection. To connect their proposed substation to the grid, AltaLink needs to build a new **transmission** line and install a new fibre optic cable.

Although AltaLink's project is required to connect TC Energy's project, it is a separate project. TC Energy will consult separately on their proposed substation and solar and battery storage facility. For more information about the TC Energy Saddlebrook Solar and Battery Storage Connection, please see their contact information on the back of this newsletter.

We are providing you with:

- project details
- a map of the proposed project
- information about how you can provide your input
- the project schedule

DEFINITION

Substation

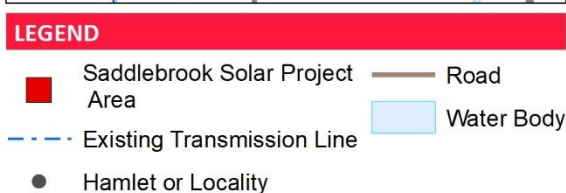
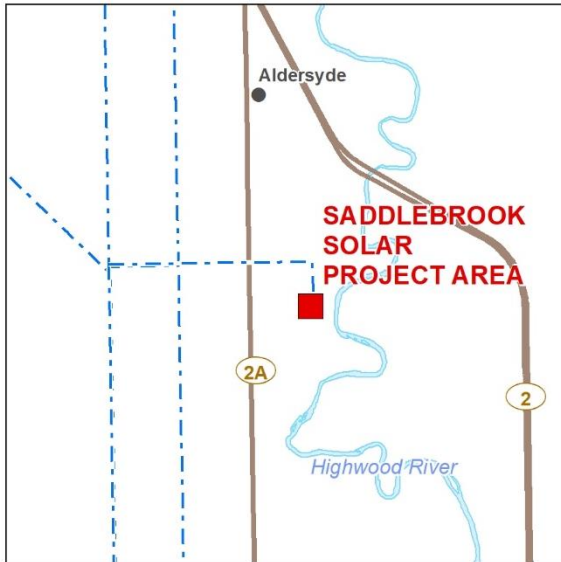
Substations are the connection points between power lines of varying voltages and contain equipment that controls and protects the flow of power. Substations include transformers that step down and step up the voltage so power can be transmitted through transmission lines or distributed to your community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

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
www.altalink.ca/projects



The new structures will look similar to the photo above.

Project details

TC Energy's proposed Saddlebrook Substation is located in Foothills County, approximately six kilometres north of the Town of High River in NW-31-19-28-W4.

AltaLink's proposed project includes constructing approximately 80 meters of new single circuit 138 kilovolt (kV) transmission line to connect TC Energy's proposed Saddlebrook Substation to AltaLink's existing 727AL transmission line.

The proposed transmission structures on the new line will:

- be one or two pole structures and may require guy wires
- be either wood or steel
- be approximately 12-20 metres tall
- have a **right-of-way** of approximately 20 metres wide

An overhead shield wire will be installed on the proposed new transmission line to protect it from lightning strikes.

Along with the new transmission line, AltaLink will install approximately two kilometres of new underground fibre optic telecommunications cable. The fibre optic cable will allow us to communicate more effectively by providing our control centre with valuable data that will be used to maintain the reliability of Alberta's electric system. The cable will be partially buried in road allowance and partially within AltaLink's existing right-of-way.

Additional construction workspace will be required on private land in order to construct the new transmission line and install the fibre optic telecommunications cable. Where private land access is required, AltaLink will contact stakeholders accordingly. Construction workspace is shown on the attached Detail Photo (DP1) map.

Please refer to the attached detail photo map (DP1) for the location of the proposed transmission line and underground fibre optic cable.

Definition:

Right-of-way

A **right-of-way (ROW)** is a strip of land required for the construction, maintenance and safe operation of a transmission line. A ROW refers to the physical space in which a transmission line is located and includes areas on either side of the transmission line structures and the conductors, which are the wires that carry the electricity.

Electric and Magnetic Fields (EMF)

AltaLink recognizes that people may have concerns about exposure to EMF and we take those concerns seriously.

Everyone in our society is exposed to power frequency EMF from many sources, including:

- power lines and other electrical facilities
- electrical appliances in your home
- building wiring

National and international organizations such as Health Canada and the World Health Organization (WHO) have been conducting and reviewing research on exposure to EMF for more than 40 years. Based on this research, these agencies have not recommended that the general public needs to take steps to limit their everyday exposure to EMF from high voltage transmission lines, including individuals that are located on the edge of a power line right-of-way.

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

Keeping the lights on during COVID-19

AltaLink is closely monitoring the spread of COVID-19. Our priority is maintaining the health and safety of our employees, contractors, and the general public while ensuring that we can continue to operate our system and keep the lights on for Albertans.

Providing your input

At this time we are limiting in-person meetings and will be conducting the majority of meetings via telephone or electronic methods. If you'd like to provide input, you can also do so through our online feedback portal: www.altalink.ca/projectfeedback. As the situation regarding COVID-19 changes we will re-assess this approach. We will update you as the situation evolves. Our focus is ensuring the lights stay on, and that you have the electricity you need.

After our consultation and notification process is complete, we will file an application with the Alberta Utilities Commission (AUC). The AUC ensures the fair and responsible delivery of Alberta's utility services and will review the application through a process in which stakeholders can participate. We will notify stakeholders when we file the application and again once the AUC has reached a decision about the project. To learn more about the AUC process and how you can become involved, please refer to the brochure included in this package titled *Participating in the AUC's independent review process*.

Contact us directly

You can contact us by telephone, email, mail, or through our website. Our contact information is on the last page of this newsletter.

Anticipated project schedule

Notify and consult with stakeholders	November/December 2021
File application with Alberta Utilities Commission (AUC)	February 2022
Start construction if project is approved	July 2022
Construction completed	September 2022

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 project please contact:

ALTALINK

1-877-267-1453 (toll free)

E-mail: stakeholderrelations@altalink.ca

Website: www.altalink.ca/projects

To learn more about TC Energy's project, please contact:

1-855-895-8754

E-mail: public_affairs_ca@tcenergy.com

To learn more about Alberta's electric system and the need for the project, please contact:

ALBERTA ELECTRIC SYSTEM OPERATOR

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

Email: 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 or the proposed transmission development to meet the need you may contact the AESO directly. You can make your questions or concerns known to a transmission facility owner 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 (toll-free by dialing 310-0000 before the number.)

E-mail: consumer-relations@auc.ab.ca

PRIVACY COMMITMENT

Altalink is committed to protecting your privacy. Collected personal information will be protected under Altalink's Privacy Policy and the Personal Information Protection Act. As part of the regulatory process for new transmission projects, Altalink may provide your personal information to 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 map
- COVID-19 Letter
- AESO Need Overview
- AUC brochure: *Participating in the AUC's independent review process*

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.twitter.com/altalink



www.facebook.com/altalinktransmission

Attachment 4 – AESO's Market Participant Notification Letter (December 1, 2021)

SENT VIA EMAIL

December 01, 2021

Notified Market Participant Corporate Legal Name
Address Line 1.
Address Line 2.
City, Province, Postal Code.

Dear Notified Market Participant Primary Contact:

Re: Planned Generating Facility Connection in the AESO's South Planning Region

The Alberta Electric System Operator (AESO) would like to advise you that TransCanada Energy Ltd. (TCE) has applied for transmission system access to connect its Saddlebrook Solar and Storage Project (planned Facility) to the Alberta interconnected electric system (AIES) in the AESO South Planning Region.

A copy of the AESO Need Overview document is attached for your information. The AESO Need Overview describes the AESO's proposed transmission development to connect the planned Facility to the AIES, and the AESO's next steps, which includes submitting a needs identification document (NID) application to the Alberta Utilities Commission (AUC) for approval.

The purpose of this letter is to advise you that the AESO has identified that, under credible worse case forecast conditions, the operation of the **[Effective Generation Facility Name] ([Effective Generation Facility Asset ID])** may be affected following the connection of the planned Facility.¹

Connection Assessment Findings

An engineering connection assessment was carried out by the AESO to assess the transmission system performance following the connection of the planned Facility. The connection assessment identified the potential for thermal criteria violations following the connection of the planned Facility, under credible worse case forecast conditions, with all transmission facilities in service (Category A). Specifically, thermal criteria violations were observed on the 138 kV transmission lines 765L and 691L. The AESO will develop mitigation measures, which may include restoring the thermal ratings of 765L and 691L, to address the observed thermal criteria violations.

In addition, thermal criteria violations were also identified when a single transmission facility is out of service (Category B) following the connection of the planned Facility. To mitigate these potential system performance issues, planned remedial action schemes (RAS), and a new RAS may be used. The AESO may also make use of real-time operational measures to mitigate these potential system performance issues, in accordance with [Section 302.1 of the ISO rules, Real Time Transmission Constraint Management](#) (TCM Rule), which is in effect today. When applied, the TCM Rule could result in the AESO issuing directives for curtailment to source assets that are effective in managing a constraint.

¹ The studies were performed assuming the Rate STS, *Supply Transmission Service*, contract capacity of 109 MW.

The connection assessment identified source assets, including the **Effective Generation Facility Asset ID]**, which are effective in mitigating the potential transmission constraints.

If the AESO determines that congestion will arise under Category A conditions, the AESO will make an application to the AUC to obtain approval for an “exception” under Section 15(2) of the *Transmission Regulation*. The AESO will notify market participants if and when the AESO determines it is necessary to apply to the AUC for approval of such an exception.

For Further Information

The engineering connection assessment will be included in the AESO’s Saddlebrook Solar and Storage Project Connection NID application. Following submission of the NID application to the AUC, the NID application will be posted on the AESO website at: <https://www.aeso.ca/grid/projects/>

If you have any questions or concerns, please contact the AESO at 1-888-866-2959 or stakeholder.relations@aeso.ca

Attachments:

AESO Need Overview: *Need for the Saddlebrook Solar and Storage Project Connection in the Town of High River area*

Need for the Saddlebrook Solar and Storage Project Connection in the Town of High River area

TransCanada Energy Ltd. (TCE) has applied to the Alberta Electric System Operator (AESO) for transmission system access to connect its proposed Saddlebrook Solar and Storage Project (Facility) in the Town of High River area. TCE's request can be met by the following solution:

PROPOSED SOLUTION

- Add one 138 kilovolt (kV) transmission line to connect the Facility to the existing 138 kV transmission line 727AL in a T-tap configuration.
- Add or modify associated equipment as required for the above transmission developments.

NEXT STEPS

- The AESO intends to apply to the Alberta Utilities Commission (AUC) for approval of the need in early-2022.
- The AESO's needs identification document (NID) application will be available on the AESO's website at www.aeso.ca/grid/projects 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.

ALTALINK

- Is the transmission facility owner in the Town of High River area.
- Is responsible for detailed siting and routing, constructing, operating and maintaining the transmission facilities.
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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.

CONTACT US

Alberta Electric System Operator

AESO Stakeholder Relations
stakeholder.relations@aeso.ca
1-888-866-2959

2500, 330-5th Avenue SW
Calgary, AB T2P 0L4
Phone: 403-539-2450

www.aeso.ca | [@theaeso](https://twitter.com/theaeso)

Attachment 5 – AESO Public Notification of ANAP Consideration Posting (September 2022)

Saddlebrook Solar and Storage Project Connection (2334)

Abbreviated Needs Approval Process: Notice of Consideration

The AESO intends to consider the need for the Saddlebrook Solar and Storage Project Connection (Project) for approval under Section 501.3 of the ISO rules, *Abbreviated Needs Approval Process*, (ANAP Rule) on or after September 16, 2022. If stakeholders have any questions or concerns, please contact the AESO before this date.

The AESO has determined that the Project is eligible for consideration under the ANAP Rule because the following eligibility criteria have been met:

- Total project cost is estimated to be approximately \$3.3M with approximately \$3M classified as participant-related and \$300K classified as system-related;
- the AESO has completed a participant involvement program (PIP) in accordance with the guidelines in Alberta Utilities Commission Rule 007;
- the Project is not anticipated to result in significant environmental effects; and
- No concerns or objections with the need for the Project have been raised. Prior to making its approval decision, the AESO will address additional stakeholder concerns that arise, if any.

Supporting information about this Project is available in the following documents:

- Engineering Connection Assessment
- TFO Cost Estimates
- AESO PIP Summary

Attachment 6 – AESO Stakeholder Newsletter Notice of ANAP Consideration (September 1, 2022)

September 1, 2022

AESO Stakeholder Newsletter



Saddlebrook Solar and Storage Project Connection - Abbreviated Needs Approval Process Notice of Consideration

The AESO intends to consider the need for the Saddlebrook Solar and Storage Project Connection for approval under Section 501.3 of the ISO rules, Abbreviated Needs Approval Process, (ANAP Rule) on or after September 16, 2022. If stakeholders have any questions or concerns, please contact the AESO before this date.

TransCanada Energy Ltd. (TCE) has applied to the AESO for transmission system access to connect its approved Saddlebrook Solar and Storage Project (Facility) in the Town of High River area. TCE's request can be met by the following solution:

- Add one 138 kilovolt (kV) transmission line to connect the Facility to the existing 138 kV transmission line 727AL in a T-tap configuration.
- Add or modify associated equipment as required for the above transmission developments.

More information is available on the AESO website. Please [click here](#) to view the project page or visit the AESO website at www.aeso.ca and follow the path Grid > Projects > Saddlebrook Solar and Storage Project Connection (2334) to see relevant supporting documents.