

# Participant Involvement Program Summary

Luna Solar+ Project Phase One Connection

**Date:** July 7, 2025

Version: V1

Classification: Public

# 1. Introduction

From April 2023 to February 2025, the AESO conducted a Participant Involvement Program (PIP) for the *Luna Solar+ Project Phase One Connection Needs Identification Document*. The AESO required the Market Participant, Northland Power Luna I GP Inc. (Market Participant) to assist the AESO in providing notification as part of the AESO's PIP. The AESO directed the legal owner of transmission facilities (TFO), in this case AltaLink Management Ltd. (AltaLink) 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 March 28, 2024.

# 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.

copy the Need Overview was posted to the **AESO** website https://www.aeso.ca/grid/transmission-projects/luna-solar-project-connection-2447 and a notice was published in the AESO Stakeholder Newsletter on April 19, 2023. 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 Market Participant and TFO's projectspecific information package that was distributed to Stakeholders, as further described in Section 2.1 and 2.2.

After the April 19, 2023 Need Overview was distributed, the AESO developed a Need Overview Update document that notified Stakeholders of a change in the AESO's proposed transmission development and a revision to the schedule. The AESO's Need Overview Update was posted on the AESO website at <a href="https://www.aeso.ca/grid/transmission-projects/luna-solar-project-connection-2447">https://www.aeso.ca/grid/transmission-projects/luna-solar-project-connection-2447</a> and a notice was published in the AESO Stakeholder Newsletter on December 4, 2024. Copies of the Need Overview Update posting and the AESO Stakeholder Newsletter notice have been included as Attachments 3 and 4, respectively. The Need Overview Update was also included with the Market Participant and TFO's project-specific information package that was distributed to Stakeholders, as further described in Sections 2.1 and 2.2.



# 2.1 Stakeholders Notified in the Market Participant's PIP

The Market Participant has advised the AESO that its PIP for the proposed Market Participant Development included two rounds of notification, one in 2023 (2023 Notification) and one in 2024 (2024 Notification), as described further below.

#### **2.1.1 2023 Notification**

The Market Participant has advised the AESO that its 2023 Notification included notification within 800 meters of the proposed transmission line right-of-way as recommended by the Commission in Appendix A1 in AUC Rule 007.<sup>1</sup>

The Market Participant notified a total of approximately 19 Stakeholders, of which 8 were classified as private or individual landowners. The other 11 notified Stakeholders are listed below:

- Alberta Environment and Protected Areas
- Alberta Ministry of Culture
- · AltaLink Management Ltd.
- Blackspur Oil Corp.
- County of Newell
- Dinosaur Gas Co-op Ltd.
- FortisAlberta Inc.
- NAV Canada AIS Data Collection
- Road 53 Resources Inc.
- Torxen Energy Ltd.
- Transport Canada

Attachment 5 includes the Market Participant's project newsletter, which included the AESO Need Overview that was distributed to the Stakeholders described above on April 10, 2023. The Market Participant's project information package included the AESO's contact information, a description of the AESO's role, a reference to the AESO Need Overview, and an invitation to contact the Market Participant or the AESO for additional information.

### 2.1.2 2024 Notification

The Market Participant has advised the AESO that its 2024 Notification included notification within 800 meters of the proposed transmission line right-of-way as recommended by the Commission in Appendix A1 in AUC Rule 007.<sup>2</sup>

The Market Participant notified a total of approximately 19 Stakeholders, of which 8 were classified as private or individual landowners. The other 11 notified Stakeholders are listed below:

- Alberta Environment and Protected Areas
- Alberta Ministry of Culture
- AltaLink Management Ltd.
- Astara Energy Corp.

<sup>&</sup>lt;sup>1</sup> The Market Participant 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.
<sup>2</sup> Ibid

- County of Newell
- Dinosaur Gas Co-op Ltd.
- Eastend Energy Corp. (c/o Long Term Asset Management Inc.)
- FortisAlberta Inc.
- NAV Canada AIS Data Collection
- Torxen Energy Ltd.
- Transport Canada

Attachment 6 includes the Market Participant's project newsletter, which included the AESO Need Overview that was distributed to the Stakeholders described above between November 28, 2024 and December 5, 2024. The Market Participant's project information package included the AESO's contact information, a description of the AESO's role, a reference to the AESO Need Overview, and an invitation to contact the Market Participant or the AESO for additional information.

### 2.2 Stakeholders Notified in the TFO's PIP

The TFO has advised the AESO that its PIP for the proposed AltaLink Development included one round of notification as described further below.

### **2.2.1 2024** Notification

The TFO has advised the AESO that its PIP included notification within 800 meters of the proposed transmission facilities as recommended by the Commission in Appendix A1 in AUC Rule 007.<sup>3</sup>

The TFO notified a total of approximately 18 Stakeholders, of which 4 were classified as private or individual landowners. The other 14 notified Stakeholders are listed below:

- Alberta Environment and Protected Areas
- Bow City Solar GP Inc
- County of Newell
- Eastern Irrigation District
- FortisAlberta Inc.
- Innovation, Science and Economic Development
- Long Term Asset Management
- Ministry of Culture, Multiculturalism and Status of Women
- NAV Canada
- Ovintiv Canada ULC.
- Telus Communications
- Torxen Energy Ltd.
- Transport Canada
- 1000380886 Ontario Ltd.

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<sup>&</sup>lt;sup>3</sup> The TFO 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.

Attachment 7 includes the TFO's project newsletter, which included the AESO Need Overview that was distributed to the Stakeholders described above between December 3, 2024 and December 12, 2024. The TFO's project newsletter was posted on the TFO's project-specific webpage at <a href="https://www.altalink.ca/project/luna-solar-battery-phase-1-connection/">https://www.altalink.ca/project/luna-solar-battery-phase-1-connection/</a> on December 3, 2024. The TFO's project information package included the AESO's contact information, a description of the AESO's role, 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 19 market participants that the AESO determined may have an interest in the Luna Solar+ Project Phase One Connection. The AESO identified that, under certain potential system conditions, these market participants may be affected following the connection of the Luna Solar+ Project Phase One Connection. A Market Participant Notification Letter, which included the AESO Need Overview, was sent to the notified market participants on January 29, 2025.

The 19 notified market participants are:

- Acciona Wind Energy Canada Inc.
- Alberta Solar One Inc.
- Beargrass Solar Inc.
- BHE Canada Rattlesnake L.P.
- Capital Power (Whitla) L.P.
- CI IV Buffalo Plains LP
- Conrad Solar Inc.
- EDF Renewables Development Inc.
- ENMAX Energy Corporation
- Forty Mile Granlea Wind GP Inc.
- PR Development Limited Partnership
- Solar Krafte Utilities Inc.
- Stirling Renewable Energy Limited Partnership
- Taber Solar 1 Inc.
- Taber Solar 2 Inc.
- TransAlta Coaldale Wind LP
- Travers 3 Solar LP
- Whitla 2 Wind Generation L.P.
- Yellow Lake & Burdett Solar LP

A generic version of the Market Participant Notification Letter was posted to the AESO website on January 30, 2025 at <a href="https://www.aeso.ca/grid/transmission-projects/luna-solar-project-connection-2447">https://www.aeso.ca/grid/transmission-projects/luna-solar-project-connection-2447</a>. A copy has been included as Attachment 8.

# 4. 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 (<u>stakeholder.relations@aeso.ca</u>). The AESO Need Overview included this contact information, along with the AESO's mailing address (2500, 330 5<sup>th</sup> Ave. SW, Calgary) and website address (<u>www.aeso.ca</u>), and a privacy statement that described how the AESO is committed to protecting Stakeholders' privacy.

As directed by the AESO, the TFO and Market Participant were prepared to direct any Stakeholder questions addressed to the AESO, or questions regarding the AESO Need Overview, to the AESO.

# 5. Questions and Concerns Raised

One Stakeholder that received the AESO's Market Participant Notification Letter raised questions and concerns related to how their operations may be affected following the connection of the Luna Solar+ Project Phase One project. The AESO responded to the Stakeholders by providing information about congestion risk in the area and the application of operational measures including curtailments.

The Market Participant and the TFO have advised the AESO that none of the Stakeholders notified by the Market Participant and 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.

Apart from the inquiry above, 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.

# 6. List of Attachments

- Attachment 1 AESO Need Overview (April 2023)
- Attachment 2 AESO Stakeholder Newsletter Need Overview Notice (April 19, 2023)
- Attachment 3 AESO Need Overview Update (November 2024)
- Attachment 4 AESO Stakeholder Newsletter Need Overview Update Notice (December 4, 2024)
- Attachment 5 Market Participant's Project Newsletter Luna MPC Solar Battery Connection Project (April 2023)
- Attachment 6 Market Participant's Project Newsletter Luna MPC Solar Battery Connection Project (October 2024)
- Attachment 7 TFO's Project Newsletter Luna Solar Battery Phase 1 Connection (November 2024)
- Attachment 8 AESO Market Participant Notification Letter (January 29, 2025)



Attachment 1 – AESO Need Overview (April 2023)



# Need for the Luna Solar Project Connection in the Brooks area

1000380886 Ontario Ltd., a wholly owned subsidiary of Northland Power Inc. (Northland Power), has applied to the AESO for transmission system access to connect its proposed Luna Solar Project (Facility) in the Brooks area. Northland Power's request can be met by the following solution:

#### PROPOSED SOLUTION

- Add one 240 kilovolt (kV) transmission line to connect the Facility to the existing 240 kV transmission line 935L in a T-tap configuration.
- Add or modify associated equipment as required for the above transmission developments.

#### **NEXT STEPS**

- In late 2023, the AESO may consider the need for this project for approval under section 501.3 of the ISO rules, Abbreviated Needs Approval Process (ANAP Rule), or apply to the Alberta Utilities Commission (AUC) for approval of the need.
- The AESO will notify stakeholders via the AESO's website at www.aeso.ca/grid/transmission-projects prior to the project being considered under the ANAP Rule or prior to filing a needs identification document (NID) application with 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.
- Can approve eligible projects through the ANAP Rule and for non-eligible projects, the AESO will prepare and submit a NID to the AUC for approval.

#### **NORTHLAND POWER**

- Has requested transmission system access to connect the Facility.
- Is responsible for detailed siting and routing and constructing the new 240 kV transmission line to connect the Facility to the transmission line 935L.
- Must apply to the AUC for approval of its transmission facilities applications.

#### **ALTALINK**

- Is the transmission facility owner in the Brooks area.
- Is responsible for operating and maintaining the new 240 kV transmission line and constructing, operating and maintaining the transmission facilities associated with the transmission line 935L modification.
- 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



Attachment 2 – AESO Stakeholder Newsletter Need Overview Notice (April 19, 2023)

# **Luna Solar Project Connection – Need for Transmission Development in the Brooks Area**

1000380886 Ontario Ltd., a wholly owned subsidiary of Northland Power Inc., has applied to the AESO for transmission system access to connect its proposed Luna Solar Project (Facility) in the Brooks area. Northland Power's request can be met by the following solution:

- Add one 240-kilovolt (kV) transmission line to connect the facility to the existing 240-kV transmission line 935L 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 <u>click here</u> to view the document or visit the AESO website at <u>www.aeso.ca</u> and follow the path Grid >Transmission-Projects > Luna Solar Project Connection (2447).



**Attachment 3 – AESO Need Overview Update (November 2024)** 



# Need for the Luna Solar Project Connection

Northland Power Luna I GP (Northland Power) has applied to the AESO for transmission system access to connect its approved Luna Solar+ Phase One (Facility) in the Brooks area.

Distribution of the original AESO Need Overview began in April 2023. As a result of a change in the solution and schedule, the AESO determined that a Need Overview Update is required to provide revised steps.

Northland Power's request can be met by the following solution:

#### PROPOSED SOLUTION

- Add one 240 kilovolt (kV) transmission line to connect the Facility to the existing 240 kV transmission line 935L in a T-tap configuration.
- Add one 240 kV transmission line to connect the Facility to the existing 240 kV transmission line 923L in a T-tap configuration.
- Add or modify associated equipment as required for the above transmission developments.

#### **NEXT STEPS**

- In early 2025 the AESO may consider the need for this project for approval under section 501.3 of the ISO rules, Abbreviated Needs Approval Process (ANAP Rule), or apply to the Alberta Utilities Commission (AUC) for approval of the need.
- The AESO will notify stakeholders via the AESO's website at www.aeso.ca/grid/transmission-projects prior to the project being considered under the ANAP Rule or when filing a needs identification document (NID) application with 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.
- Can approve eligible projects through the ANAP Rule and for non-eligible projects, the AESO
  will prepare and submit a NID to the AUC for approval.

#### **NORTHLAND POWER**

- Has requested transmission system access to connect the Facility.
- Is responsible for detailed siting and routing, and constructing the new 240 kV transmission lines to connect the Facility to the transmission lines 935L and 923L.
- Must apply to the AUC for approval of its transmission facilities applications.

#### **ALTALINK**

- Is the transmission facility owner in the Brooks area.
- Is responsible for operating and maintaining the new 240 kV transmission lines and constructing, operating and maintaining the transmission facilities associated with the transmission line 935L and 923L modifications.
- Is regulated by the AUC and must apply to the AUC for approval of their 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

3000. 240 - 4 Avenue SW

Calgary, AB T2P 4H4

Phone: 403-539-2450

www.aeso.ca | X @theaeso



Attachment 4 – AESO Stakeholder Newsletter Need Overview Update Notice (December 2, 2024)

# **Updated Need Overview – Luna Solar Project Connection**

Northland Power Luna I GP (Northland Power) has applied to the AESO for transmission system access to connect its approved Luna Solar+ Phase One (Facility) in the Brooks area.

Distribution of the original AESO Need Overview began in April 2023. As a result of a change in the solution and schedule, the AESO determined that a Need Overview Update is required to provide revised steps.

<u>Click here</u> to view the details of the proposed transmission development and access the Need Overview document or visit <u>aeso.ca</u>: Grid >Transmission-Projects > Luna Solar Project Connection (P2447).



Attachment 5 – Market Participant's Project Newsletter – Luna MPC Solar Battery Connection Project (April 2023)



You are receiving this newsletter because you are near the Luna and Luna II MPC Solar Battery Connection Project and we are seeking your input.

# **ABOUT THE PROJECT**

1000380886 Ontario Ltd., a wholly owned subsidiary of Northland Power Inc., (the Proponent) has applied to the Alberta Electric System Operator (AESO) for transmission system access to connect its proposed Luna Solar+ Project to the Alberta electric system. For the Luna Solar+ Project Connection Project, the Proponent is proposing to construct approximately 5 km of new transmission line running north-south, known as 923AL and 935AL, and approximately 5 km of new transmission line running east-west (the Project), to connect the proposed Apollo 1041S and Artemis 1067S substations to the existing AltaLink Management Ltd. (AltaLink) 240 kV transmission lines 923L and 935L in a T-tap configuration. The Proponent is responsible for the design and construction of the new transmission line. Once in service, AltaLink will assume the operation and maintenance of the new line as part of the Alberta Interconnected Electric System (AIES).

# **ABOUT NORTHLAND POWER**

Northland Power is a power producer dedicated to developing, building, owning and operating clean and green global power infrastructure assets in Asia, Europe, Latin America, North America and other selected global jurisdictions. Our facilities produce electricity from clean-burning natural gas and renewable resources such as wind, solar and efficient natural gas. We have a long track record of 35 years in business. Some stakeholders may be familiar with the Luna Solar+ Project as being previously owned by Greengate. Ownership of the Luna I and II Solar+ and Connection Projects has transferred from Greengate Power Corporation to Northland Power Inc.; relevant project contacts remain the same.

### IN THIS NEWSLETTER:

- About the Project
- About Northland Power
- Project Details
- Selecting a Route
- Structure Information
- Land Acquisition
- Providing Your Input
- Who is the AUC?
- Who is the AESO?
- Facility Application
- Project Schedule
- Who is AltaLink?
- Contact Us

#### **INSERTS:**

NORTHLAND

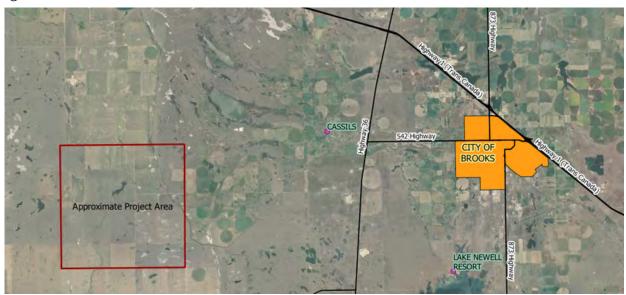
- Preliminary Project Map
- Structure Sheet
- AESO Need Overviews
- AUC Brochure

### **PRIVACY STATEMENT**

Collected personal information will be protected under the provincial Personal Information Protection Act. As part of the regulatory process for new generation projects and transmission lines, the Proponent may be required to provide your personal information to the Alberta Utilities Commission (AUC).

# **PROJECT DETAILS**

The proposed Project is located approximately 11 km southwest of the Hamlet of Cassils, as shown on the map below. The proposed Apollo 1041S substation is located in SE 36-18-17 W4M and the proposed Artemis 1067S substation is located in the SW 34-18-17 W4M. The interconnection is for both substations and will run south to the existing AltaLink transmission line, which runs east-west along Township Road 182. The new transmission line easement width is expected to be approximately 35m wide, to be confirmed based on engineering design. The easement will be acquired from private landowners. Design is ongoing and further details will be provided as the Project progresses.



# **SELECTING A ROUTE**

Several factors are taken into account in an effort to site a route with the least overall impact. Some of the factors considered include: existing land use, environmental effects, agriculture, existing infrastructure, public and interested party feedback, proximity to residences and economic viability.

One east-west route, and three potential north-south routes are being proposed for this Project, as shown on the enclosed route maps. The north-south routes could be on either side of the road allowance. These potential route options are preliminary and there has not yet been a decision regarding placement of the transmission line. We are seeking to discuss the proposed Project with those in proximity to the potential transmission line locations to better understand how the land is used and how this Project may affect you before we prepare our final routing and submission to the AUC for approval. The Proponent will permit, construct and temporarily operate the transmission line. Approximately six months following energization, the transmission line will be turned over to AltaLink for operation.



# STRUCTURE INFORMATION

The new 240kV transmission lines are expected to consist of double circuit structures along the north-south route, and single circuit structures along the east-west route.

Double circuit structure types consist of two possible options, with selection to be finalized in detailed design for optimal arrangement.

- Double circuit steel lattice structures are expected to be approximately 30-50m in height.
- Double circuit steel monopole structures are expected to be approximately 30-45m in height.

An approximate 35m wide right of way will be required for these structures, however may be up to 60m subject to further design work.

For the single circuit transmission line segments, three possible structure type options will be considered, with selection to be finalized in detailed design for optimal arrangement.

- Single circuit steel lattice structures are expected to be approximately 30-40m in height.
- Single circuit steel monopole structures are expected to be approximately 30-40m in height.
- Single circuit wood H-Frame structures are expected to be 25-30m in height.

An approximate 30m wide right of way will be required for these structures, however may be up to 45m subject to further design work.

Where possible, the transmission structures would generally be located within the existing road allowance, although specific sites may require occasional poles located within a right-of-way on private land. An approximately 9-15m easement for construction and maintenance access may be required on private property adjacent to the road allowance alignment.

Should wood structures be selected based on detailed design, guyed dead end or angle structures may require additional right of way extending beyond the normal line right of way for guy wires and anchors. Please refer to the enclosed structure sheet for more details.

# **LAND ACQUISITION**

Where possible, the transmission structures would generally be located within the existing road allowance, although specific sites may require occasional poles located within a permanent right-of-way on private land. An approximately 9-15m easement for construction and maintenance access may be required on private property adjacent to the road allowance alignment. In addition to the easement, temporary areas will be required for workspace and access roads. Landowners will be compensated for the required easement, and any structures on their land.



# **PROVIDING YOUR INPUT**

The Project is still in the early planning stages and the more information you are able to provide, the better equipped we are to incorporate feedback into the routing process that will be undertaken. Feedback received will be documented and considered before presenting a preferred and alternate route to the public and then filing an application with the Alberta Utilities Commission.

We will be reaching out to landowners, residents and occupants within 100m of the proposed Project to gather input and address questions or concerns, however we encourage you to contact us by email or phone once you have reviewed this package to discuss the Project. After the consultation process is complete, we will file an application with the AUC. The AUC will review the application through a process in which stakeholders can participate, and will notify stakeholders after the Facilities Application has been submitted. 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.

# WHO IS THE AUC?

The Alberta Utilities Commission (AUC) is a quasi-judicial independent agency established by the Government of Alberta, responsible to ensure that the delivery of Alberta's utility service takes place in a manner that is fair, responsible and in the public interest.

They regulate investor-owned natural gas, electric and water utilities, and certain municipally owned electric utilities to ensure that customers receive safe and reliable service at just and reasonable rates. The AUC ensures that electric facilities are built, operated and decommissioned in an efficient and environmentally responsible way. The AUC also provides regulatory oversight of issues related to the development and operation of the wholesale electricity market in Alberta as well as the retail gas and electricity markets in the province. For more information visit www.auc.ab.ca or refer to the enclosed brochure.



# WHO IS THE 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 make your questions or concerns known to a SABR Energy 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) stakeholder.relations@aeso.ca 1-888-866-2959 www.aeso.ca

# **FACILITY APPLICATION**

A transmission facility owner proposing to build an electric facility must submit an application to the AUC to obtain a permit to construct and a license to operate the facility. The application filed is often referred to as a facility application. The Proponent expects to file a facility application in Q4 2023. The AUC will then review the facility application and either approve (with or without conditions) or deny the application.

# PRELIMINARY PROJECT SCHEDULE

Notification to stakeholders – April 2023
Public Consultation – Ongoing
File Facilities Application with AUC – Q4 2023
Anticipated AUC Approval – Q4 2023/Q1 2024
Construction Commencement (if approved) – April 2024
Construction Completion - December 2024

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

Alberta Utilities Commission (AUC)

Phone: (780) 427-4903

Toll-Free by dialing 310-000 before the number

Email: consumer-relations@auc.ab.ca



# WHO IS ALTALINK?

AltaLink is responsible for any modifications to AltaLink's existing 240 kV transmission lines 923L and 935L that are also required to connect the Project. AltaLink's modifications are separate from the facilities that the Proponent is proposing to construct, and AltaLink will send a separate newsletter detailing their proposed work. To learn more about the connection to the existing transmission lines owned by AltaLink, please contact: AltaLink Management Ltd. 1-877-267-1453 (toll-free) or stakeholderrelations@altalink.ca



# **CONTACT US**

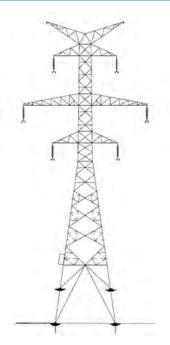
If you have any questions about the Project, or to arrange a personal consultation, please contact:



Samantha Brown
SABR Energy Consulting Inc.
P: (587) 434-7547

E: sbrown@sabrenergyconsulting.com

# **PRELIMINARY STRUCTURE SHEET**



240kV Double Circuit Lattice Tower Typical Tangent Structure Steel, height range approximately 30m – 50m



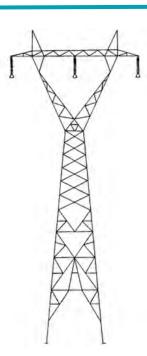
240kV Double Circuit Steel Monopole Typical Tangent Structure Height range approximately 30m – 45m



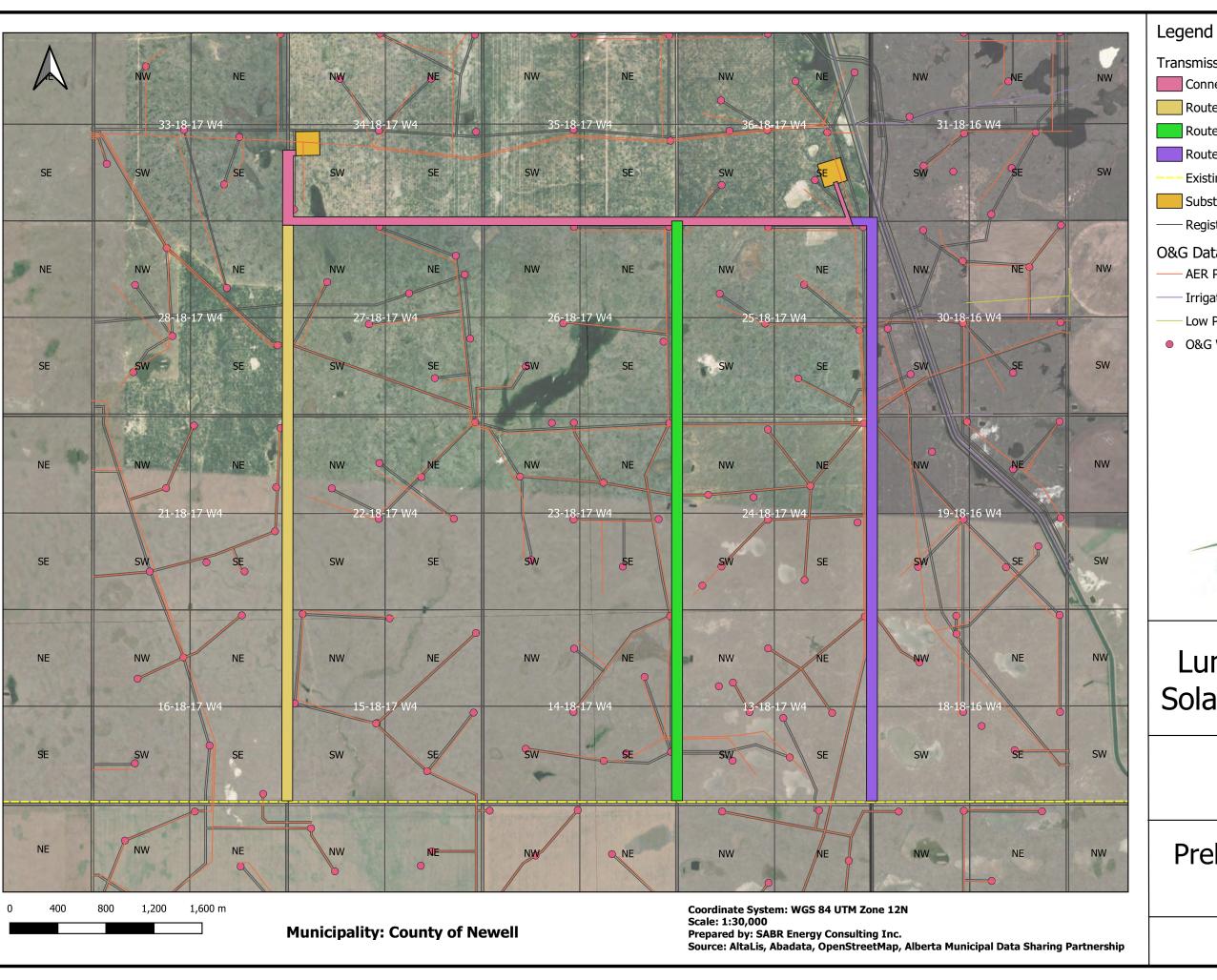
240kV Single Circuit Steel Monopole Typical Tangent Structure Height range approximately 30m – 40m



240kV Single Circuit – Wood H-Frame Tangent Structure Height range approximately 25m-30m



240kV Single Circuit Lattice Tower – Typical Tangent Structure Steel, height range approximately 30m – 40m



**Transmission Line Options** 

Connector

Route A

Route B

Route C

Existing Transmission Line

Substation

Registered Rights-of-way

O&G Data

**AER Pipelines** 

Irrigation Pipelines

Low Pressure Pipelines

O&G Wells



# Luna and Luna II MPC **Solar Battery Connection**



# **Preliminary Transmission** Routes

Date: March 29, 2023



# Need for the Luna Solar Project Connection in the Brooks area

1000380886 Ontario Ltd., a wholly owned subsidiary of Northland Power Inc. (Northland Power), has applied to the AESO for transmission system access to connect its proposed Luna Solar Project (Facility) in the Brooks area. Northland Power's request can be met by the following solution:

#### PROPOSED SOLUTION

- Add one 240 kilovolt (kV) transmission line to connect the Facility to the existing 240 kV transmission line 935L in a T-tap configuration.
- Add or modify associated equipment as required for the above transmission developments.

#### **NEXT STEPS**

- In late 2023, the AESO may consider the need for this project for approval under section 501.3 of the ISO rules, Abbreviated Needs Approval Process (ANAP Rule), or apply to the Alberta Utilities Commission (AUC) for approval of the need.
- The AESO will notify stakeholders via the AESO's website at www.aeso.ca/grid/transmission-projects prior to the project being considered under the ANAP Rule or prior to filing a needs identification document (NID) application with 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.
- Can approve eligible projects through the ANAP Rule and for non-eligible projects, the AESO will prepare and submit a NID to the AUC for approval.

#### **NORTHLAND POWER**

- Has requested transmission system access to connect the Facility.
- Is responsible for detailed siting and routing and constructing the new 240 kV transmission line to connect the Facility to the transmission line 935L.
- Must apply to the AUC for approval of its transmission facilities applications.

#### **ALTALINK**

- Is the transmission facility owner in the Brooks area.
- Is responsible for operating and maintaining the new 240 kV transmission line and constructing, operating and maintaining the transmission facilities associated with the transmission line 935L modification.
- 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



# Need for the Luna 2 Solar Project Connection in the Brooks area

1000380886 Ontario Ltd., a wholly owned subsidiary of Northland Power Inc. (Northland Power), has applied to the AESO for transmission system access to connect its proposed Luna 2 Solar Project (Facility) in the Brooks area. Northland Power's request can be met by the following solution:

#### PROPOSED SOLUTION

- Add one 240 kilovolt (kV) transmission line to connect the Facility to the existing 240 kV transmission line 923L in a T-tap configuration.
- Add or modify associated equipment as required for the above transmission developments.

#### **NEXT STEPS**

- In late 2023, the AESO may consider the need for this project for approval under section 501.3 of the ISO rules, Abbreviated Needs Approval Process (ANAP Rule), or apply to the Alberta Utilities Commission (AUC) for approval of the need.
- The AESO will notify stakeholders via the AESO's website at www.aeso.ca/grid/transmission-projects prior to the project being considered under the ANAP Rule or prior to filing a needs identification document (NID) application with 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.
- Can approve eligible projects through the ANAP Rule and for non-eligible projects, the AESO will prepare and submit a NID to the AUC for approval.

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# Step 5: Consultation and negotiation (if applicable)\*

The Commission supports ongoing efforts to reach an agreeable outcome for the applicant and all affected parties. The Commission encourages the applicant and those who have filed a statement to continue to attempt to resolve any outstanding issues. If all concerns can be satisfactorily resolved this may eliminate the need for a formal hearing. However, if there continues to be unresolved issues, those matters will typically be addressed at an AUC hearing.

# **Step 6: The public hearing process\***

The AUC will issue a notice of hearing if there continues to be legitimate unresolved concerns with the application. The notice of hearing will provide a hearing date and location in addition to a process schedule. The AUC conducts public hearings in its Edmonton and Calgary hearing rooms and, where suitable venues exist, in communities closer to the proposed project area.

The public hearing process allows persons with standing that have unresolved concerns about the application, to express their views directly to a panel of Commission members.

An AUC hearing is a formal, evidence-based, court-like proceeding. The public can attend the hearing in person or listen to hearings online through the AUC's website.

Participants in a hearing can either represent themselves or be represented by a lawyer. In addition, participants may hire experts to assist in preparing and presenting evidence to support their position.

### Cost assistance

A person determined by the Commission to be a local intervener can apply for reimbursement of reasonable costs. Those who hire a lawyer or technical experts must be aware that while reimbursement for the costs of legal and technical assistance is available under AUC Rule 009: *Local Intervener Funding*, recovery of costs is subject to the Commission assessing the value of the

contribution provided by the lawyer and technical experts. People with similar interests and positions are expected to work together to ensure that expenditures for legal or technical assistance are minimized and costs are not duplicated.

# **Step 7: The decision**

The AUC's goal is to issue its written application decision no more than 90 days after the hearing is complete. The Commission can approve, or deny an application and can also make its approval conditional upon terms or conditions. All AUC decision reports are available to any member of the public on the AUC's website or by obtaining a printed copy from the AUC.

# **Step 8: Opportunity to appeal**

An applicant or dissatisfied participant may formally ask the Court of Appeal of Alberta for permission to appeal a Commission decision. An application for permission to appeal must be filed within 30 days from the date the decision is issued.

An applicant or dissatisfied participant can also ask the Commission to review its decision. An application to review a Commission decision must be filed within 60 days from the date the decision is issued and satisfy the limited grounds described in AUC Rule 016: *Review and Variance of Commission Decisions*.

# **Step 9: Construction, operation and compliance**

An applicant that receives approval to build and operate a facility from the Commission must adhere to any conditions that were set out in that approval. If concerns about compliance with approval conditions and post-construction operations cannot be resolved with the applicant, they can be brought to the AUC's attention for consideration. The AUC has significant compliance and enforcement powers for all approved applications. Additional information is available on the AUC website under "Compliance and enforcement."

\*Opportunity for public involvement

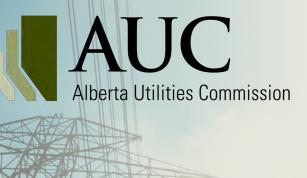
The Alberta Utilities Commission is an independent, quasi-judicial agency of the Government of Alberta that ensures the delivery of Alberta's utility services take place in a manner that is fair, responsible and in the public interest.

# **Contact us**

Phone: 310-4AUC (310-4282 in Alberta) 1-833-511-4AUC (1-833-511-4282 outside Alberta) Email: info@auc.ab.ca

Eau Claire Tower 106 Street Building 1400, 600 Third Avenue S.W. 10th Floor, 10055 106 Street Calgary, Alberta T2P 0G5 Edmonton, Alberta T5J 2Y2

The Alberta Utilities Commission is committed to ensuring that Albertans whose rights may be directly and adversely affected by a utility development project are informed of the application and have the opportunity to have their concerns heard, understood and considered.



Participating in the AUC's independent review process

# **Application review process**

Step 1: Public consultation prior to application by proponent

Step 2: Application filed with the AUC

Step 3: Public notice issued by the AUC

Step 4: Public submissions to the AUC

Step 5: Consultation and negotiation

Step 6: The public hearing process

**Step 7: The decision** 

Step 8: Opportunity to appeal

Step 9: Construction, operation and compliance

www.auc.ab.ca

# The AUC's regulatory role in needs and facility applications and its independent review and hearing process:

The AUC uses an established process, outlined in this brochure, to review social, economic and environmental impacts of facility projects to decide if approval is in the public interest. Approvals from the AUC are required for the construction, operation, alteration and decommissioning of transmission lines and electric substations.

Approvals are required for:

- The need for transmission upgrades.
- The route and location of transmission facilities.
- The siting of power plants, including renewables such as wind and solar more than five megawatts.

Sometimes a needs application is considered together with a facility application in a single hearing; sometimes separate hearings may be held to consider each application.

# Step 1: Public consultation prior to application\*

Prior to filing an application with the AUC for the approval of a proposed utility development, the applicant must engage in a public consultation program in the area of the proposed project, so that concerns may be raised, addressed and, if possible, resolved.

The application guidelines and requirements for facility applications can be found in AUC Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments,* and AUC Rule 020: *Rules Respecting Gas Utility Pipelines*.

Potentially affected parties are strongly encouraged to participate in the initial public consultation, as early involvement in discussions with an applicant may lead to greater influence on project planning and what is submitted to the AUC for approval.

The Alberta Electric System Operator, as the system planner, will notify potentially affected stakeholders of applications on the need for transmission development.

# **Step 2: Application filed with the AUC**

When the participant involvement requirements have been completed, the applicant files its application with the AUC through a public filing system, called the eFiling System, on the AUC website.

The application is then reviewed to ensure the information required by the Commission is included. If the required information is not provided, the AUC may close the application or request more information from the applicant. In the application, any issues that were raised during the public consultation and any related amendments to the proposal should be identified. All unresolved objections or concerns identified during the public consultation must be described in the application.

### **Step 3: Public notice**

The AUC generally issues a notice by mail directly to those who live, operate a business or occupy land in the project area who may be affected by the Commission's decision on the proposed project. The notice for larger facility projects with potentially greater impacts may also be published in local newspapers.

The notice will specify a submission deadline. The information required by this deadline is general in nature as outlined in Step 4. Additional opportunities to provide evidence and additional information will arise after this deadline.

# **Step 4: Public submissions to the AUC\***

The AUC review process is referred to as a proceeding. Anyone with unresolved objections or concerns about the application can file a brief written statement with the AUC on the proceeding. The easiest way to file a statement is to fill out the form through the eFiling System found on the AUC website. The statement must include your contact information, where you reside or own property in relation to the proposed facility, your concern or interest in the application, an explanation of your position and what you feel the AUC should decide.

The AUC uses the information it gathers through the forms to decide whether to hold a hearing on the application(s). The Commission must hold a hearing if a person can demonstrate that he or she has rights that may be directly or adversely affected by the Commission's decision on the application. Such a person is said to have standing before the Commission. If the AUC decides to hold a hearing, the AUC will provide further opportunities for participants with standing to understand the application and present their position on the application either in writing or in person.

Subject to some limited exceptions, all information and materials provided as part of an AUC proceeding will become part of the public record and will be available through the eFiling System. The AUC's treatment of some types of information as confidential is rare and only available under limited circumstances to ensure that the AUC's process is open and transparent.

# **AUC eFiling System**

The eFiling System is the tool that the AUC uses to manage applications and submissions in its proceeding-based review. The eFiling System gives access to all public documents associated with an application and is how to provide your input to the AUC and monitor the related proceeding filings. Those who do not have access to the internet can send submissions, evidence and other material by mail and the AUC will upload the submission on their behalf.

# \*Opportunity for public involvement



Attachment 6 – Market Participant's Project Newsletter – Luna MPC Solar Battery Connection Project (October 2024)



You are receiving this newsletter because you are near the Luna MPC Solar Battery Connection Project and we are seeking your input.

# **BACKGROUND**

Northland Power Luna I GP Inc. (the "Proponent") is proposing to build the double-circuit 240kV Luna I MPC Solar Battery Connection (the "Project"), to allow the AUC-approved Luna I Solar+ Project (the "Luna Site") to connect to the Alberta Interconnected Electric System ("AIES"). At this time, the Proponent is only proceeding with the Luna I MPC Solar Battery Connection Project as the Luna II MPC Solar Battery Connection is no longer in the Alberta Electric System Operator ("AESO") connection process. The Alberta Utilities Commission ("AUC") approval for the Luna II Solar+ Project remains active.

# **PROJECT UPDATE**

Since the initial April 2023 newsletter regarding the Project, a project-specific legal entity has been set up for the Luna I project, Northland Power Luna I GP Inc. This entity is a wholly owned subsidiary of Northland Power Inc. The Proponent and its representatives have consulted with interested stakeholders and continued engineering design and environmental studies to evaluate viable Project route alignments from the Luna Site to the connection point on AltaLink Management Ltd.'s ("Altalink") existing 240kV transmission lines.

The Proponent has, since April 2023, narrowed down the possible route alignments for the Project to a "preferred" route and an "alternate" route, and intends to submit a Facilities Application to the AUC by March 2025. As shown in the attached map, Route B is the preferred route and Route C is the alternate route. A prior route option, Route A, was removed after (i) discussions with, and feedback from, local stakeholders and (ii) a review of environmental constraints.

### IN THIS NEWSLETTER:

- Background
- Project Update
- Project Details & Need for the Project
- Route Selection & Refinements
- Contact Us
- Providing Your Input
- Who is the AUC?
- Land Acquisition
- Facility Application
- Project Schedule Update
- Who is AltaLink?
- Who is the AESO?

#### **INSERTS:**

- Updated Project Map
- Structure Sheets
- AUC Brochure

### **PRIVACY STATEMENT**

Collected personal information will be protected under the provincial Personal Information Protection Act. As part of the regulatory process for new generation projects and transmission lines, the Proponent may be required to provide your personal information to the Alberta Utilities Commission (AUC).

# **PROJECT DETAILS & NEED FOR THE PROJECT**

The Proponent has applied to the AESO for transmission system access to connect the Luna Site to the AIES via the approved Apollo 1041S substation located in the SE 36-18-17 W4M. Under the Market Participant Choice ("MPC") program, the Proponent will construct approximately 5 km of new transmission line running north-south from the substation to the existing AltaLink transmission line, which runs east-west along Township Road 182.

Should the preferred Route B be selected, the Proponent intends to move the Apollo 1041S substation to SE 35-18-17 W4M to optimize the Project's design and minimize stakeholder and environmental impacts; any required substation shift will be included in the AUC submission for the transmission line project discussed in this newsletter.

The Proponent is responsible for the design and construction of the new transmission line. Once in service the line is expected to be transferred to AltaLink through the MPC program. In that program, Altalink will assume operation and maintenance of the line as part of AIES.



# **ROUTE SELECTION & REFINEMENTS**

Multiple factors are considered when selecting route options, with key drivers being the reduction of overall impact to the community and the environment. Specific factors include: existing land use, environmental constraints, agricultural activities, existing infrastructure, public and interested party feedback, proximity to residences, and economic viability.

The expected design of the transmission line's tower structures and the typical right of way width is shown on the enclosed right of way cross sections. Most structures will be constructed using galvanized steel, however some structures may be constructed using wood poles. At corners, where the line deflects, or at the start and end of the transmission line, special angle and dead-end structures are required.

The typical double circuit tangent structures have the following characteristics:

- Height is from 36 m to 45 m
- Width is from 18.5 to 20 m
- Span length is 175 m to 320 m
- The right-of-way width of the double circuit structure is 55 m, when paralleling roads the right of way width is 44 m.

# **CONTACT US**

If you have any questions about the Project, or to arrange a personal consultation, please contact:



Samantha Brown
SABR Energy Consulting Inc.
P: (587) 434-7547

E: sbrown@sabrenergyconsulting.com



# **PROVIDING YOUR INPUT**

Feedback from stakeholders is important in order to present line routing options that minimize impacts to people and the environment. The feedback we receive assists us in identifying areas with potentially higher impacts and therefore allows us to minimize impacts to people and their interests. We will continue to contact landowners, residents and occupants adjacent to the Project to gather further input and address any outstanding questions or concerns. After the Proponent collects feedback on Project design, we will file an application with the AUC. The AUC will review the application through a process in which stakeholders can participate. The AUC will notify stakeholders after the Facilities Application has been submitted. 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.



# **WHO IS THE AUC?**

The Alberta Utilities Commission is a quasi-judicial independent agency established by the Government of Alberta, responsible to ensure that the delivery of Alberta's utility service takes place in a manner that is fair, responsible and in the public interest.

They regulate investor-owned natural gas, electric and water utilities, and certain municipally owned electric utilities to ensure that customers receive safe and reliable service at just and reasonable rates. The AUC ensures that electric facilities are built, operated and decommissioned in an efficient and environmentally responsible way. The AUC also provides regulatory oversight of issues related to the development and operation of the wholesale electricity market in Alberta as well as the retail gas and electricity markets in the province. For more information visit www.auc.ab.ca or refer to the enclosed brochure.

# **LAND ACQUISITION**

The proposed Project will be located entirely on private land. The north-south section (from A-10 to A-20 and B-10 to B-20) will require a typical right-of-way 44 m wide. Sections A-1 to A-10 and B-1 to B-10 will require a typical right-of-way 55m wide. At corners and at the start and end of the line, additional right-of-way will be needed for multi-pole structures, for guy wires and to connect the new lines to the substation and existing AltaLink lines. All rights-of-way have been acquired from landowners in the form of a utility right-of-way agreement. Temporary workspace is also required along the transmission line for construction purposes and will has been acquired from landowners in the form of a temporary workspace agreement.



# **FACILITY APPLICATION**

A transmission facility owner proposing to build an electric facility must submit an application to the AUC to obtain a permit to construct and a license to operate the facility. The application filed is often referred to as a facility application. The Proponent expects to file a facility application by March 2025. The AUC will then review the facility application and either approve (with or without conditions) or deny the application.

# **PROJECT SCHEDULE UPDATE**

Initial Notification to stakeholders – April 2023
Notification #2 to Stakeholders – October 2024
Public Consultation – Ongoing
File Facility Application with AUC – by March 2025
Anticipated AUC Approval – July 2025
Construction Commencement (if approved) – November 2026
In-Service Date – December 2027

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

Alberta Utilities Commission (AUC)
Phone: (780) 427-4903
Toll-Free by dialing 310-000 before the number
Email: consumer-relations@auc.ab.ca



# WHO IS ALTALINK?

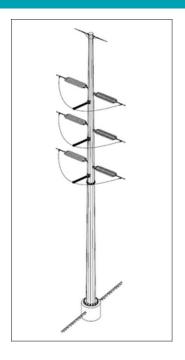
AltaLink is responsible for any modifications to AltaLink's existing 240 kV transmission lines 923L and 935L that are also required to connect the Project. AltaLink's modifications are separate from the facilities that the Proponent is proposing to construct, and AltaLink will send a separate newsletter detailing their proposed work. To learn more about the connection to the existing transmission lines owned by AltaLink, please contact: AltaLink Management Ltd. 1-877-267-1453 (toll-free) or stakeholderrelations@altalink.ca

# WHO IS THE AESO?

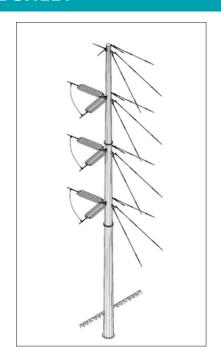
The AESO is an independent, not-for-profit organization responsible for the safe, reliable and economic planning and operation of the provincial transmission grid. For more information about why this Project is needed, please refer to the AESO's Need Overview included with this package, or visit www.aeso.ca. 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 make your questions or concerns known to a SABR Energy 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) stakeholder.relations@aeso.ca 1-888-866-2959 www.aeso.ca

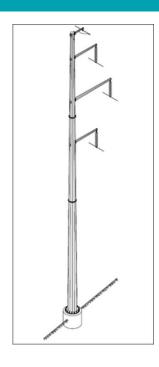
# **PRELIMINARY STRUCTURE SHEET**



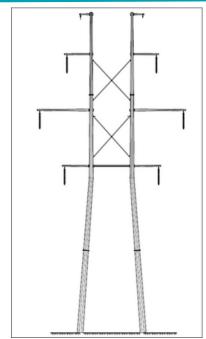
Free Standing One Pole Deadend Height Range Approximately 25-45M



Guyed One Pole Deadend Height Range Approximately 25-45M Guy Wire Length: ~15-40M

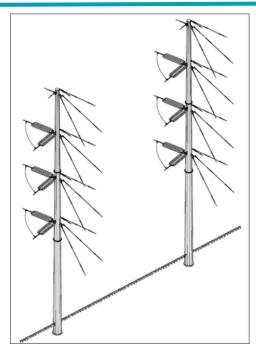


One Pole Tangent Height Range Approximately 35-50M Width: ~7-9M



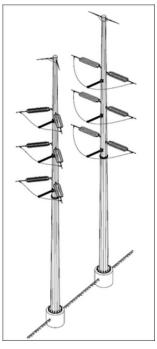
H Frame Tangent Height Range Approximately 36-45M Width: ~18-20M

Pole Spacing: ~7-9M

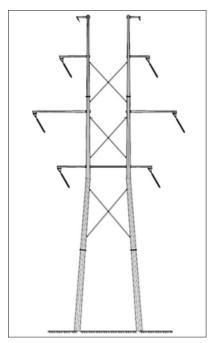


Guyed 2 Pole Deadend Height Range Approximately 25-45M Pole Spacing: ~24M Guy Wire Length: ~15-35M

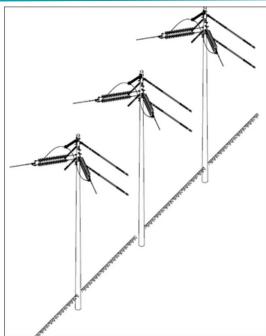
# **PRELIMINARY STRUCTURE SHEET**



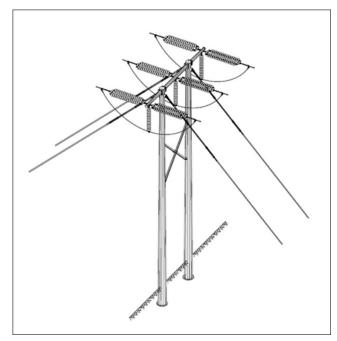
Free Standing Two Pole Deadend Height Range Approximately 20-45M Pole Spacing: ~10M



H-Frame Angle Height Range Approximately 36-45M Width: ~18-20M Pole Spacing: ~7-9M



Guyed Three Pole Deadend Height Range Approximately 10-30M Pole Spacing: ~8-10M Guy Wire Length: ~10-30M



Guyed Two Pole Deadend Height Range Approximately 15-25M Pole Spacing: ~6-7M Guy Wire Length: ~10-30M



Attachment 7 – TFO's Project Newsletter – Luna Solar Battery Phase 1 Connection (November 2024)





# You are receiving this newsletter because you are near the Luna Solar Battery Phase 1 Connection, and we want your input.

To connect Northland Power Luna | GP Inc.'s (Northland) proposed Luna Solar Battery Phase 1 Project to the grid, AltaLink is proposing changes to its **transmission** system. The project is located in the County of Newell, approximately 20 kilometres southwest of the City of Brooks.

AltaLink is proposing modifications to an existing transmission line, building a temporary transmission line and installing a new **telecommunications tower** to connect Northland's solar battery, **substation** and transmission line project to the grid.

Northland is consulting with landowners on its project separately. For more information about Northland's project, please see their contact information included in this newsletter.



**DID YOU KNOW?** According to the Alberta Electric System Operator, a total of 14 new solar facilities, with a combined capacity of 512 MW, came online in 2023, increasing the total solar capacity to 1,650 MW by the end of the year.



#### **ANTICIPATED PROJECT SCHEDULE**

NOVEMBER 2024 - FEBRUARY 2025

Notify and consult with stakeholders

**MARCH 2025** 

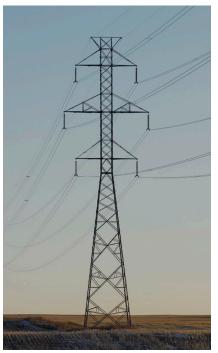
File application with Alberta Utilities Commission (AUC) FEBRUARY 2027

Start construction if project is approved

**JUNE 2027** 

Construction completed





**Top photo**: The new transmission structure will look similar to the above.

**Bottom photo**: The new telecommunications tower will look similar to the above.

# **Project details**

As part of its Luna Solar Battery Phase 1 Project, Northland is proposing to build a new substation, to be called Apollo, and a new transmission line to connect to AltaLink's existing 923L/935L transmission line. Northland is considering two potential sites and routes for its project. Only one of these options will be constructed based on the final site determined by Northland and approved by the Alberta Utilities Commission (AUC). More information about the project can be found in the maps included in this package.

To accommodate this connection, AltaLink is proposing to:

- add one new structure to its 923L/935L transmission line
- build approximately 800 metres of temporary transmission line to ensure a reliable supply of power during construction; this temporary transmission line will be removed once construction is complete
- install a new telecommunications tower within Northland's proposed Apollo Substation, which will be located at either SE-35-18-17-W4 or SE-36-18-17-W4

To facilitate the safe construction of the temporary transmission line, AltaLink may require temporary workspace. AltaLink will consult with all affected stakeholders regarding potential construction workspace.

#### **Transmission structure**

The proposed new structure on the existing 923L/935L will:

- be a steel lattice structure
- require approximately six metres of additional right-of-way
- be between 35 and 45 metres tall

### **Telecommunications tower**

The proposed telecommunications tower will:

- be a self-supported steel structure with a triangular base
- be approximately 30 metres tall, including the antenna and lightning rod
- comply with Transport Canada's requirements regarding painting and lighting
- not be accessible to the public, as the structure will be inside the fenced area of an operating substation and support AltaLink equipment only



# **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



# Radio Frequency (RF)

Telecommunication towers use Radio Frequency (RF) signals to transmit and receive information. The point-to-point signals travel along a focused path at low power levels and are well below recommended safety limits.

Licensed radio links on a telecommunications tower will not impact any other licensed telecommunication frequencies used by cellular phones, over-the-air television, satellite, radio, or GPS.

The telecommunication tower described in this notification will be installed and operated on an ongoing basis to be in compliance with Health Canada's Safety Code 6, which defines safe levels of RF exposure.

To ensure the structural adequacy of the tower, the design and installation will follow industry standards and sound engineering practices.

For general information relating to telecommunications systems, please contact:

Innovation, Science and Economic Development Canada

1-800-267-9401 (toll free in Canada) Website: www.ic.gc.ca/towers

#### **DEFINITIONS:**

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, solar, natural gas and more.

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.

#### **Telecommunications tower**

Telecommunications towers support equipment that transmits data to our system control centre. This allows us to monitor the operation of the electric system and ensure we provide safe and reliable power to our customers.

Right-of-way | The right-of-way (ROW) is a strip of land required for the construction and safe operation of a transmission line. A right-of-way refers to the physical space a transmission line encompasses including areas on either side of the line.

INCLUDED **IN THIS INFORMATION PACKAGE:** 

- Project maps
- AUC brochure: Participating in the AUC's independent review process to consider facility applications
- AESO need overview

# **Providing your input**

We will contact landowners, residents, and occupants near the proposed project to gather input and address questions or concerns.

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 to consider facility applications.

#### **OUR COMMITMENT TO SUSTAINABILITY**

If the Alberta Utilities Commission (AUC) approves this project, you may see or hear construction crews in the area. We have set strict standards by which we operate, including restricting work hours to reduce the impacts to residents and businesses, ensuring safe construction practices and following environmental protection measures and appropriate environmental legislation. AltaLink believes that the environmental effects of this project will be negligible.

This project is not located on federal lands, therefore Canadian Environmental Assessment Act, 2012 does not apply. AltaLink's safety standards and practices are developed to meet or exceed government guidelines and codes to ensure that our facilities meet the requirements for public, employee and neighbouring facility safety.

#### **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.

#### Contact us

To learn more about the proposed project please contact:

#### ALTALINK

1-877-267-1453 (toll free) E-mail: stakeholderrelations@altalink.ca

#### To subscribe to this project:

visit www.altalink.ca/projects, search for the project title, and click 'subscribe to updates'

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.

To learn more about Northland's project, please contact:

#### Northland Power Inc.

Samantha Brown

SABR Energy Consulting Inc., on behalf of Northland Power Inc.

E: sbrown@sabrenergyconsulting.com P: 1-587-434-7547

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 Website: www.altalink.ca/projects

The AESO is an independent, notfor-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.









**Attachment 8 – AESO Market Participant Notification Letter (January 29, 2025)** 



January 29, 2025

# Notified Market Participant Corporate Legal Name

Address Line 1.
Address Line 2.
City, Province, Postal Code.

### Dear Notified Market Participant Primary Contact:

### Re: Need for the Luna Solar Project Connection

The Alberta Electric System Operator (AESO) would like to advise you that Northland Power Luna I GP (Northland Power) has applied for transmission system access to connect its approved Luna Solar+ Phase One (Facility) to the Alberta interconnected electric system (AIES) in the AESO South Planning Region.

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

# **Connection Assessment Findings**

An engineering connection assessment was carried out by the AESO to assess the transmission system performance following the connection of the approved Facility. <sup>1</sup> The connection assessment identified the potential for thermal criteria violations following the connection of the Facility, under credible worse case forecast conditions, with all transmission facilities in service (Category A).

Category A thermal criteria violations on the 138 kV transmission lines 770L and 172L were exacerbated following the connection of the Facility. New Category A thermal criteria violations were observed on the 240 kV transmission lines 924L and 927L following connection of the Facility. Should the AESO determine that mitigation is required to address potential thermal criteria violations under Category A conditions, the AESO may develop operational procedures or other mitigation measures.

In addition, thermal and voltage criteria violations were also identified when a single transmission facility is out of service (Category B) following the connection of the Facility. To mitigate the potential Category B system performance issues, existing remedial action schemes (RASs) 164, 175, 180, 219 may be used. In addition, a new RAS for 935L/923L will be required to connect the Facility.

The AESO will make use of real-time operational measures to mitigate these potential system performance issues, in accordance with <u>Section 302.1 of the ISO rules</u>, <u>Real Time Transmission Constraint Management</u> (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

Public

<sup>&</sup>lt;sup>1</sup> The studies were performed assuming the Rate STS, *Supply Transmission Service*, contract capacity of 465 MW and a Rate DTS, *Demand Transmission Service*, contract capacity of 1.5 MW.



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

The AESO will continue to monitor the pace of generation development and will notify market participants if it determines that it is necessary 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 Alberta Utilities Commission (AUC) for approval of such an exception.

### For Further Information

The AESO Need Overview document is attached for your information. The AESO Need Overview describes the AESO's proposed transmission development to connect the Facility to the AIES.

The engineering connection assessment will be included in the AESO's Luna Solar Project Connection needs identification document (NID) application. Following submission of the NID application to the Alberta Utilities Commission, the NID application will be posted on the AESO website at: <a href="https://www.aeso.ca/grid/transmission-projects/">https://www.aeso.ca/grid/transmission-projects/</a>. Stakeholders will be notified when this occurs via the AESO stakeholder newsletter.

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: Luna Solar Project Connection

2 Public

# aeso

# Need for the Luna Solar Project Connection

Northland Power Luna I GP (Northland Power) has applied to the AESO for transmission system access to connect its approved Luna Solar+ Phase One (Facility) in the Brooks area.

Distribution of the original AESO Need Overview began in April 2023. As a result of a change in the solution and schedule, the AESO determined that a Need Overview Update is required to provide revised steps.

Northland Power's request can be met by the following solution:

#### PROPOSED SOLUTION

- Add one 240 kilovolt (kV) transmission line to connect the Facility to the existing 240 kV transmission line 935L in a T-tap configuration.
- Add one 240 kV transmission line to connect the Facility to the existing 240 kV transmission line 923L in a T-tap configuration.
- Add or modify associated equipment as required for the above transmission developments.

#### **NEXT STEPS**

- In early 2025 the AESO may consider the need for this project for approval under section 501.3 of the ISO rules, Abbreviated Needs Approval Process (ANAP Rule), or apply to the Alberta Utilities Commission (AUC) for approval of the need.
- The AESO will notify stakeholders via the AESO's website at www.aeso.ca/grid/transmission-projects prior to the project being considered under the ANAP Rule or when filing a needs identification document (NID) application with 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.
- Can approve eligible projects through the ANAP Rule and for non-eligible projects, the AESO
  will prepare and submit a NID to the AUC for approval.

#### **NORTHLAND POWER**

- Has requested transmission system access to connect the Facility.
- Is responsible for detailed siting and routing, and constructing the new 240 kV transmission lines to connect the Facility to the transmission lines 935L and 923L.
- Must apply to the AUC for approval of its transmission facilities applications.

#### **ALTALINK**

- Is the transmission facility owner in the Brooks area.
- Is responsible for operating and maintaining the new 240 kV transmission lines and constructing, operating and maintaining the transmission facilities associated with the transmission line 935L and 923L modifications.
- Is regulated by the AUC and must apply to the AUC for approval of their 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

3000. 240 - 4 Avenue SW

Calgary, AB T2P 4H4

Phone: 403-539-2450

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