



Suncor Forty Mile Wind Power Project Whitla 251S Substation Connection PIP Summary

1.0 Introduction

The AESO's Participant Involvement Program (PIP) is designed to notify the parties notified in the transmission facility owner's (TFO's) PIP and any other parties that the AESO determines may have an interest in the needs identification document, including, but not limited to:

- i. occupants, landowners or residents;
- ii. local authorities, agencies and government which have responsibilities related to electric transmission line development:
- iii. First Nations and Métis; and
- iv. market participants

(collectively, Stakeholders).

The AESO's PIP has been conducted in accordance with the requirements of Section 6.2.1, NID19 and Appendix A2 of the current Alberta Utilities Commission (Commission) Rule 007 (AUC Rule 007), effective April 2, 2018.

From April 2017 to November 2018, the AESO conducted a PIP to assist in preparing its Suncor Forty Mile Wind Power Project Whitla 251S Substation Connection Needs Identification Document (NID). The AESO directed the TFO, in this case AltaLink Management Ltd., in its capacity as general partner of AltaLink, L.P., to assist the AESO in providing notification as part of the AESO's PIP.

Stakeholder Notification 2.0

The AESO developed a one-page AESO Need Overview document that notified 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, including the AESO's intention to apply to the Commission for approval of the need.

Overview AESO Need was posted the website the to https://www.aeso.ca/grid/projects/suncor-forty-mile-wind-power-project-whitla-connection/ and a



notice was published in the AESO Stakeholder Newsletter on April 11, 2017. 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 packages that were distributed to Stakeholders, as further described in Section 2.1.

After the April 2017 Need Overview was distributed, the AESO developed an updated one-page AESO Need Overview Update that notified Stakeholders of the market participant's request to also connect a solar facility, and a revision to the date that the AESO intends to apply to the Commission for approval of the need. The AESO Need Overview Update was posted on the AESO website at https://www.aeso.ca/grid/projects/suncor-forty-mile-wind-power-project-whitla-connection/ and a notice was published in the AESO Stakeholder Newsletter on November 28, 2017. Copies of the AESO Need Overview Update posting and the AESO Stakeholder Newsletter notice have been included as Attachments 3 and 4, respectively. The AESO Need Overview Update was also included with the TFO's updated project-specific information packages that were distributed to Stakeholders, as further described in Section 2.1.

After the AESO Need Overview Update was distributed, the AESO developed an updated onepage AESO Need Overview Update II that notified Stakeholders of the following:

- the market participant had withdrawn its request to connect a solar facility;
- the legal name of the market participant requesting system access service had changed; and
- the date that the AESO intends to apply to the Commission for approval of the need had been updated.

The AESO Need Overview Update II was posted on the AESO website at https://www.aeso.ca/grid/projects/suncor-forty-mile-wind-power-project-whitla-connection/ and a notice was published in the AESO Stakeholder Newsletter on October 30, 2018. Copies of the October 2018 Updated Need Overview posting and the AESO Stakeholder Newsletter notice have been included as Attachments 5 and 6, respectively. The AESO Need Overview Update II was also included with the TFO's updated project-specific information packages that were 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 m of the proposed transmission right-of-way, the existing Whitla 251S substation and the proposed underground fibre optic installation as recommended by the Commission in Appendix A1 of AUC Rule 007.

December 2018

Alberta Electric System Operator

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Altalink has identified its facility application to be of the type: Overhead or underground transmission line and/or new substation upgrades and/or minor transmission line replacements within the original right-of-way – urban, as categorized in AUC Rule 007, Appendix A1, Section 5.



The TFO notified a total of approximately 35 Stakeholders,² of which 11 were classified as private or individual landowners. The other 24 notified Stakeholders and the TFO's rationale for their inclusion in the PIP are listed in Table 1.

Table 1: Summary of Notified Agency and Industry Stakeholders

Stakeholder	TFO's Rationale for Inclusion in the PIP
Alberta Culture and Tourism	Provincial requirements
Alberta Environment and Parks – Fish and Wildlife	Provincial requirements
Alberta Environment and Parks – Lands	Provincial requirements
Management	·
Alberta Transportation - Operations	Provincial requirements
Alberta Wind Energy Corporation	Industrial Facility Owner in the project
	notification area
Capital Power Corporation	Industrial Facility Owner in the project
	notification area
County of Forty Mile No.8	Municipal requirements
Craft Oil Ltd.	Pipeline Owner in the project notification area
Ducks Unlimited	Special Interest Group in the project
	notification area
Equs (REA) Ltd.	Distribution Facility Owner in the project
	notification area
FortisAlberta Inc.	Distribution Facility Owner in the project
	notification area
Forty Mile Gas Co-op Ltd.	Pipeline Owner in the project notification area
Forty Mile Granlea Wind GP Inc.	Encumbrance holder in the project notification
	area
Manitok Energy Inc.	Pipeline Owner in the project notification area
MLA for Cypress-Medicine Hat	Provincial requirements
MLA for Medicine Hat	Provincial requirements
NAV CANADA – Aeronautical Information Services	Aeronautical data collection
Data Collection Unit/Land Use Office	
Office of the Farmer's Advocate	Special Interest
Petrocapita Oil and Gas L.P.	Pipeline Owner in the project notification area
Regent Resources Ltd	Pipeline Owner in the project notification area
Suncor Energy Inc.	Pipeline Owner in the project notification area
Telus Communications Company	Communication Facility Owner in the project
	notification area notification area
Longspur Developments (Formerly Temporis	Industrial Facility Owner in the project
Developments)	notification area
Teric Power Ltd.	Industrial Facility Owner in the project
	notification area

Attachment 7 includes the TFO's project newsletter (Volume 1), which was included with the AESO Need Overview in the TFO project-specific information package that was distributed to

Alberta Electric System Operator

² Altalink has indicated in its facility application that 33 stakeholders were notified. This discrepancy is a result of two stakeholders (elected officials) not having received addressed mail but hand delivery of the project-specific information packages.



the Stakeholders described above between April 2017 and August 2017. The TFO's project newsletter (Volume 1) and the AESO Need Overview were also posted on the TFO's project-specific webpage at http://www.altalink.ca/projects/view/259/suncor-forty-mile-wind-power-project-connection on April 7, 2017. The TFO's project newsletter (Volume 1) 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.

Attachment 8 includes the TFO's project newsletter (Volume 2), which was included with the AESO Need Overview Update in the updated TFO project-specific information package that was distributed to the Stakeholders described above between August 2017 and October 2018. The TFO's project newsletter (Volume 2) and the AESO Need Overview Update were also posted on the TFO's project-specific webpage at http://www.altalink.ca/projects/view/259/suncor-forty-mile-wind-power-project-connection on August 29, 2017. The TFO's project newsletter (Volume 2) included the AESO's contact information, a description of the AESO's role, a reference to the AESO Need Overview Update, and an invitation to contact the TFO or the AESO for additional information.

Attachment 9 includes the TFO's project update letter, which was included with the AESO Need Overview Update II in the updated TFO project-specific information package that was distributed to the Stakeholders described above in November 2018. The TFO's project update letter and the AESO Need Overview Update II were also posted on the TFO's project-specific webpage at http://www.altalink.ca/projects/view/259/suncor-forty-mile-wind-power-project-connection on November 2, 2018. The TFO's project update letter included the AESO's contact information, a description of the AESO's role, a reference to the AESO Need Overview Update II, and an invitation to contact the TFO or the AESO for additional information.

3.0 Stakeholders Notified by the AESO

The AESO also notified five market participants that the AESO determined may have an interest in the NID. The AESO identified that, under certain potential system conditions, these market participants may be affected following the connection of the Suncor Forty Mile Wind Power Project. A Market Participant Notification Letter, which included the AESO Need Overview Update II, was sent to the notified market participants on October 25, 2018.

The five notified market participants are as follows:

- · Cancarb Ltd.
- Capital Power (Whitla) L.P.
- NaturEner Energy Canada Inc.
- The City of Medicine Hat
- Pteragen Canada Inc.³

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³ Pteragen Canada Inc. was notified on November 30, 2018, after the AESO discovered that Pteragen Canada Inc. was inadvertently missed during the October 25, 2018 distribution.



A generic version of the Market Participant Notification Letter was posted to the AESO website on October 25, 2018 at https://www.aeso.ca/grid/projects/suncor-forty-mile-wind-power-project-whitla-connection/ A copy has been included as Attachment 10.

4.0 Filing Notification

Most recently, the AESO notified Stakeholders of its intention to submit the NID to the Commission by posting a Notification of NID Filing to the AESO website at https://www.aeso.ca/grid/projects/suncor-forty-mile-wind-power-project-whitla-connection/ and a publishing notice in the AESO Stakeholder Newsletter on November 20, 2018. Copies of the Notification of NID Filing posting and the AESO Stakeholder Newsletter notice have been included as Attachments 11 and 12, respectively.

5.0 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 5th 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 was prepared to direct any Stakeholder questions addressed to the AESO, or questions regarding the AESO Need Overview, to the AESO.

6.0 Concerns and Objections Raised

The TFO has advised that Stakeholders have not 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 from any party about the AESO's preferred option to respond to the system access service request or the need for development.

7.0 List of Attachments

- Attachment 1 AESO Need Overview (April 2017)
- Attachment 2 AESO Stakeholder Newsletter Need Overview Notice (April 11, 2017)
- Attachment 3 AESO Need Overview Update (August 2017)
- Attachment 4 AESO Stakeholder Newsletter Need Overview Update (November 28, 2017)
- Attachment 5 AESO Need Overview Update II (October 2018)
- Attachment 6 AESO Stakeholder Newsletter Need Overview Update II (October 30, 2018)
- Attachment 7 TFO's Project Newsletter Suncor Forty Mile Wind Power Project Connection (April 2017)



- Attachment 8 TFO's Project Update Newsletter Suncor Forty Mile Wind Power Project Connection (August, 2017)
- Attachment 9 TFO's Project Update Letter Suncor Forty Mile Wind Power Project Connection (October 29, 2018)
- Attachment 10 AESO Market Participant Notification Letter (October 25, 2018)
- Attachment 11 AESO Public Notification of NID Filing Website Posting (November 2018)
- Attachment 12 AESO Stakeholder Newsletter NID Filing Notice (November 20, 2018)



Attachment 1 – AESO Need Overview (April 2017)



Need for the Suncor Forty Mile Wind Power Project Energy Connection in the Maleb area

Suncor Energy Inc. (Suncor) has applied to the Alberta Electric System Operator (AESO) for transmission system access to connect its proposed Suncor Forty Mile Wind Power Project (Facility) in the Maleb area. Suncor's request can be met by the following solution:

PROPOSED SOLUTION

- Modify the existing Whitla 251S substation, including adding a 240 kilovolt (kV) circuit breaker.
- Add a 240 kV transmission line to connect the Facility and the existing Whitla 251S substation.
- Add or modify associated equipment as required for the above transmission developments.

NEXT STEPS

- In late 2017, the AESO intends to submit a needs identification document (NID) to the Alberta Utilities Commission (AUC) for approval.
- Once submitted, the NID will be posted on the AESO's website at www.aeso.ca/grid/projects/

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 MANAGEMENT LTD.:

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

FAST FACT

Alberta's electric transmission system comprises the towers, wires and related equipment that are a part of moving electricity from where it is generated to where it is used.

CONTACT US

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.

Alberta Electric System Operator Jennifer Vollmer

AESO Stakeholder Relations

stakeholder.relations@aeso.ca 1-888-866-2959

2500, 330-5th Avenue SW Calgary, AB T2P 0L4 Phone: 403-539-2450 Fax: 403-539-2949

www.aeso.ca | y @theaeso

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.

The AESO is committed to protecting your privacy. Your feedback, comments and/or contact information collected by the AESO will be used to respond to your inquiries and/ or to provide you with further information about the project. The AESO will not use your personal information for any other purpose and will not disclose your information without consent or a legal obligation. If you choose to communicate by email, please note, email is not a secure form of communication. Security of your communication while in transit cannot be guaranteed.



Attachment 2 – AESO Stakeholder Newsletter Need Overview Notice (April 11, 2017)

AESO Stakeholder Newsletter

GRID

Suncor Forty Mile Wind Power Project Energy Connection – Need for Transmission Development in the Maleb area

Suncor Energy Inc. (Suncor) has applied to the Alberta Electric System Operator (AESO) for transmission system access to connect its proposed Suncor Forty Mile Wind Power Project (Facility) in the Maleb area. Suncor's request can be met by the following solution:

- Modify the existing Whitla 251S substation, including adding a 240 kilovolt (kV) circuit breaker.
- Add a 240 kV transmission line to connect the facility and the existing Whitla 251S substation.
- 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 > Projects > Suncor Forty Mile Wind Power Project Energy Connection.



Attachment 3 – AESO Need Overview Update (August 2017)



Need for the Suncor Forty Mile Wind and Solar Power Projects Connection in the Maleb area

The Alberta Electric System Operator (AESO) has revised its description of Suncor Energy Inc.'s (Suncor's) request for transmission system access to include the connection of both the proposed Suncor Forty Mile Solar Power Project and the Suncor Forty Mile Wind Power Project (collectively, the Facilities). The original AESO Need Overview was distributed in April 2017. Since that time, the AESO has identified that the proposed solution will also connect the Suncor Forty Mile Solar Power Project, where previously only the proposed Suncor Forty Mile Wind Power Project was identified.

PROPOSED SOLUTION

- Modify the existing Whitla 251S substation, including adding a 240 kilovolt (kV) circuit breaker.
- Add a 240 kV transmission line to connect the Facilities to the existing Whitla
- Add or modify associated equipment as required for the above transmission developments.

NEXT STEPS

- In early 2018, the AESO intends to submit a needs identification document (NID) to the Alberta Utilities Commission (AUC) for approval.
- Once submitted, the NID will be posted on the AESO's website at www.aeso.ca/grid/projects/

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 MANAGEMENT LTD.:

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

FAST FACT

Alberta's electric transmission system comprises the towers, wires and related equipment that are a part of moving electricity from where it is generated to where it is used.

CONTACT US

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.

Alberta Electric System Operator Jennifer Vollmer

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2500, 330-5th Avenue SW Calgary, AB T2P 0L4 Phone: 403-539-2450 Fax: 403-539-2949

www.aeso.ca | y @theaeso

WHO IS THE AESO?

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The AESO is committed to protecting your privacy. Your feedback, comments and/or contact information collected by the AESO will be used to respond to your inquiries and/or or to provide you with further information about the project. The AESO will not use your personal information for any other purpose and will not disclose your information without consent or a legal obligation. If you choose to communicate by email, please note, email is not a secure form of communication. Security of your communication while in transit cannot be guaranteed.



Attachment 4 - AESO Stakeholder Newsletter Need Overview Update (November 28, 2017)

AESO Stakeholder Newsletter

GRID

Information Update for the Suncor Forty Mile Wind and Solar Power Projects Connection – Need for Transmission Development in the Maleb Area

The Alberta Electric System Operator (AESO) has revised its description of Suncor Energy Inc.'s (Suncor's) request for transmission system access to include the connection of both the proposed Suncor Forty Mile Solar Power Project and the Suncor Forty Mile Wind Power Project (collectively, the Facilities). The original AESO Need Overview was distributed in April 2017.

Since that time, the AESO has identified that the proposed solution will also connect the Suncor Forty Mile Solar Power Project, where previously only the proposed Suncor Forty Mile Wind Power Project was identified. Suncor's request can be met by the following solution:

- Modify the existing Whitla 251S substation, including adding a 240 kilovolt (kV) circuit breaker
- Add a 240 kV transmission line to connect the Facilities to the existing Whitla 251S substation
- Add or modify associated equipment as required for the above transmission developments

The AESO has posted a Need Overview Update 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 > Project > Suncor Forty Mile Wind and Solar Power Projects Connection.



Attachment 5 – AESO Need Overview Update II (October 2018)



Need for the Suncor Forty Mile Wind Power Project Whitla Connection in the Maleb area

Forty Mile Granlea Wind GP Inc. (Forty Mile GP), a wholly owned subsidiary of Suncor Energy Inc. has submitted two applications to the Alberta Electric System Operator (AESO) for transmission system access to connect its proposed Suncor Forty Mile Wind Power Project (Facility) in the Maleb area.

One of these requests can be met by a connection to the existing 240 kV transmission line 964L, as further described in the AESO Need Overview Update (October 2018), "Need for the Suncor Forty Mile Wind Power Project 964L Connection in the Maleb area".

Separately, the AESO described its proposed solution to meet Forty Mile GP's other request in the previous version of this AESO Need Overview Update, originally distributed in August 2017. Since that time, Suncor has withdrawn its request to connect the Suncor Forty Mile Solar Power Project and the date the AESO intends to apply to the Alberta Utilities Commission (AUC) for approval of the need has changed. The AESO's proposed solution to connect the Facility has not changed.

Forty Mile GP's request can be met by the following solution:

PROPOSED SOLUTION

- Modify the existing Whitla 251S substation, including adding one 240 kilovolt (kV) circuit breaker.
- Add one 240 kV transmission line to connect the Facility to the Whitla 251S substation.
- 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 late-2018.
- 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 Maleb 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?

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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

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www.aeso.ca | > @theaeso





AESO Stakeholder Newsletter

OGRID

Information Update for the Suncor Forty Mile Wind Power Project Whitla Connection – Need for Transmission Development in the Maleb Area

Forty Mile Granlea Wind GP Inc. (Forty Mile GP), a wholly owned subsidiary of Suncor Energy Inc., has submitted two applications to the Alberta Electric System Operator (AESO) for transmission system access to connect its proposed Suncor Forty Mile Wind Power Project (Facility) in the Maleb area.

One of these requests can be met by a connection to the existing 240 kV transmission line 964L, as further described in the AESO Need Overview Update (October 2018), "Need for the Suncor Forty Mile Wind Power Project 964L Connection in the Maleb Area."

Separately, the AESO described its proposed solution to meet Forty Mile GP's other request in the previous version of this AESO Need Overview Update, originally distributed in August 2017. Since that time, Suncor has withdrawn its request to connect the Suncor Forty Mile Solar Power Project and the date upon which the AESO intends to apply to the Alberta Utilities Commission for approval of the need has changed. The AESO's proposed solution to connect the Facility has not changed.

Forty Mile GP's request can be met by the following solution:

- Modify the existing Whitla 251S substation, including adding one 240 kV circuit breaker
- Add one 240 kV transmission line to connect the Facility to the Whitla 251S substation
- Add or modify associated equipment as required for the above transmission development

The AESO has posted a Need Overview Update 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 > Project > Suncor Forty Mile Wind Power Project Whitla Connection.



Attachment 7 – TFO's Project Newsletter – Suncor Forty Mile Wind Power Project Connection (April 2017)



Electric system improvements near you

Suncor Forty Mile Wind Power Project Connection



You are receiving this newsletter because you are near the Suncor Forty Mile Wind Power Project Connection and we want your input.

Suncor has requested a connection to the **transmission** system for their proposed wind power project. AltaLink is proposing to construct a transmission line, operated and maintained by AltaLink, to connect Suncor's Maleb **Substation** to AltaLink's Whitla Substation.

Although AltaLink's project is separate from Suncor's project, it is required to facilitate the connection of the proposed wind power project. Please contact Suncor for more information on their proposed wind power project. Their contact information is on the back of this newsletter.

We are providing you with:

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

Please note that this project is separate from the nearby potential Renewable Energy Systems Canada Forty Mile Wind Power Project Connection, which is also shown on the attached map. **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, high-efficiency coal,
natural gas and more.

DEFINITIONS

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.

CONTACT US

1-877-267-1453 stakeholderrelations@altalink.ca Visit us online at www.altalink.ca/projects Electric and Magnetic Fields (EMF)

AltaLink recognizes that people have concerns about exposure to Electric and Magnetic Fields (EMF) and we take those concerns very seriously.

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

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

National and international organizations such as the World Health Organization and Health Canada have been conducting and reviewing research about EMF for more than 40 years. Based on this research, these organizations have not recommended the general public take steps to limit their everyday exposure to EMF from high voltage transmission lines.

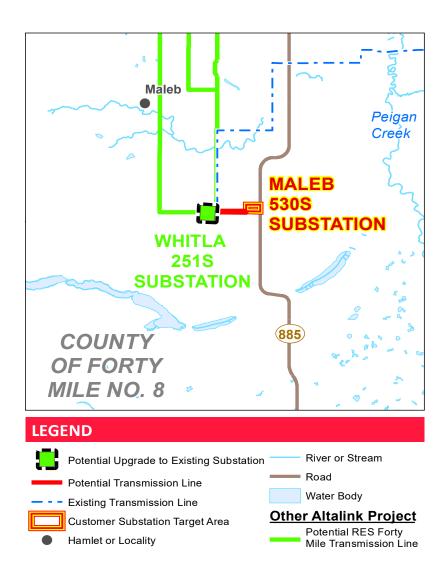
If you have any questions about EMF please contact us:

Website: www.altalink.ca/emf Email: emfdialogue@altalink.ca Toll-free phone number: 1-866-451-7817

DEFINITIONS

Circuit breaker

Circuit breakers are electrical switches inside a substation that protect substation equipment. Circuit breakers help ensure the safety and reliability of the electric system



Project details

Suncor has requested a connection to the transmission system to connect AltaLink's existing Whitla Substation in NW 33-7-9 W4 to Suncor's Maleb Substation.

We are proposing to build approximately 2.5 to 3 kilometres of 240 kilovolt (kV) transmission line. The final transmission line length is dependent on the final route selected, and approved, by the Alberta Utilities Commission (AUC).

A new 240 kV circuit breaker and other associated equipment will be required at the Whitla Substation, which will not require any modifications to the existing substation layout. AltaLink will also be installing optical ground wiring (also known as OPGW) on top of the new transmission line for protection and telecommunications purposes.

Anticipated project schedule

Notify and consult with stakeholders	Spring - Summer 2017
File application with Alberta Utilities Commission (AUC)	Fall 2017
Start construction if project is approved	Fall 2018
Construction complete	Spring 2019

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.

Transmission structures The proposed single circuit 240 kV transmission structures will:

- be two pole H-frame
- be steel
- be approximately 17 to 25 metres tall
- have a distance between structures of approximately 200 to 250 metres
- have a right-of-way approximately
 30 metres wide on private property

Please note that additional structure types may also be considered for this project. Stakeholders will be notified of all proposed structure types prior to our application being filed with the AUC.



Two pole H-frame structure similar to the proposed

How to provide your input

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

We will refine our routing following consultation with stakeholders and then announce our final routes prior to filing an application with the AUC. The AUC 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 *Public involvement in a proposed utility development*.

Route selection

We have identified two potential routes that would be suitable to connect the Whitla Substation

to the Suncor Maleb Substation. AltaLink's potential routes and Suncor's substation target area are shown on the map included in this package. If the project is approved by the AUC, only one route will be built. AltaLink takes several factors into consideration in an effort to find a route with low overall environmental, social and economic effects. In addition to stakeholder input we also consider other effects, such as agricultural, residential, environmental and visual impacts, as well as cost.

Easements, off right-of-way access and construction workspace Additional temporary workspace, outside of the right-of-way in certain areas may be required in order to access and construct the transmission line. The construction workspace is intended to be primarily used for equipment access during construction, including the potential stringing areas located behind some corner structures.

AltaLink will consult with all affected landowners regarding the potential requirement for construction workspace. Final construction workspace and off right-of-way access will be determined following further detailed engineering and construction planning for the project and will be discussed with landowners prior to, and during construction of the line. Additional right-of-way for the purposes of guy wires for corner structures will also be required.

Potential construction workspace and guy anchor easements are shown on the attached map.



The existing Whitla Substation

PRIVACY COMMITMENT

AltaLink is committed to protecting your privacy. Your personal information is collected and will be protected under AltaLink's Privacy Policy and Alberta's Personal Information Protection Act. As part of the regulatory process for new transmission projects, AltaLink may provide your personal information to the 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 email privacy@altalink.ca or phone at 1-877-267-6760.

INCLUDED IN THIS INFORMATION PACKAGE:

- Project map
- AESO Need Overview
- AUC brochure: Public involvement in a proposed utility development



Contact us

To learn more about the proposed Suncor Forty Mile Wind Power Project Connection, please contact:

ALTALINK

1-877-267-1453 (toll-free) stakeholderrelations@altalink.ca www.altalink.ca/projects

To learn more about Suncor, please contact:

SUNCOR

1-866-344-0178 (toll-free) fortymile@suncor.com www.suncor.com/about-us/wind-power

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

ALBERTA ELECTRIC SYSTEM OPERATOR (AESO)

1-888-866-2959 (toll-free) stakeholder.relations@aeso.ca

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 you may contact the AESO directly. You can make your questions or concerns known to an AltaLink 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.



2611 - 3rd Avenue SE Calgary, Alberta T2A 7W7

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*

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

ALBERTA UTILITIES COMMISSION (AUC)

780-427-4903

(You can call toll-free by dialing 310-0000 before the number).

Email: utilitiesconcerns@auc.ab.ca

The Alberta Utilities Commission (AUC) ensures the fair and responsible delivery of Alberta's utility services. AltaLink submits applications for new transmission projects to the AUC and the AUC reviews them in a public process.



Attachment 8 – TFO's Project Update Newsletter – Suncor Forty Mile Wind Power Project Connection (August, 2017)



You are receiving this newsletter because you are near the Suncor Forty Mile Wind Power Project Connection and we want your input.

Suncor has requested a connection to the **transmission** system for their proposed wind power project and solar project. AltaLink is proposing to construct a transmission line, operated and maintained by AltaLink, to connect Suncor's Maleb **Substation** to AltaLink's Whitla Substation.

Although AltaLink's project is separate from Suncor's project, it is required to facilitate the connection of the proposed wind power project and solar project. Please contact Suncor for more information on their proposed wind and solar power projects. Their contact information is on the back of this newsletter.

We are providing you with:

- project details
- the project schedule
- our preferred and alternate routes
- information about how you can provide your input
- a map of the proposed project

Please note that this project is separate from the nearby potential Renewable Energy Systems Canada Forty Mile Wind Power Project Connection, which is also shown on the attached map. 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, high-efficiency coal,
natural gas and more.

DEFINITIONS

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.

CONTACT US

1-877-267-1453 stakeholderrelations@altalink.ca Visit us online at www.altalink.ca/projects Electric and Magnetic Fields (EMF)

AltaLink recognizes that people have concerns about exposure to Electric and Magnetic Fields (EMF) and we take those concerns seriously.

Everyone in our society is exposed to 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 have been conducting and reviewing research about EMF for more than 40 years. Based on this research, these organizations have not recommended the general public take steps to limit their everyday exposure to EMF from high voltage transmission lines.

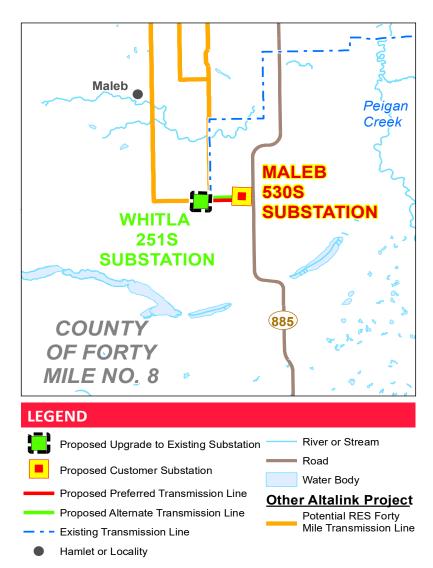
If you have any questions about EMF please contact us:

Website: www.altalink.ca/emf Email: emfdialogue@altalink.ca Toll-free phone number: 1-866-451-7817

DEFINITIONS

Circuit breaker

Circuit breakers are electrical switches inside a substation that protect substation equipment. Circuit breakers help ensure the safety and reliability of the electric system



Project details

Suncor has requested a connection to the transmission system to connect AltaLink's existing Whitla Substation in NW 33-7-9 W4 to Suncor's Maleb Substation.

We are proposing to build approximately 2.6 kilometres of 240 kilovolt (kV) transmission line. The final transmission line length is dependent on the final route selected, and approved, by the Alberta Utilities Commission (AUC).

A new 240 kV circuit breaker and other associated equipment will be required at the Whitla Substation, which will not require any expansion to the existing substation fenceline. AltaLink will also be installing optical ground wire (also known as OPGW) on top of the new transmission line for protection and telecommunications purposes. A section of OPGW may be placed underground beneath an existing transmission line approximately 700 metres east of the Whitla Substation.

Anticipated project schedule

Notify and consult with stakeholders	Spring - Fall 2017
File application with Alberta Utilities Commission (AUC)	Early 2018
Start construction if project is approved	Fall 2018
Construction complete	Spring 2019

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.

Route Selection

AltaLink takes several factors into consideration in an effort to find routes with low overall impact, in addition to stakeholder input. Some of the factors we consider include agricultural, residential, environmental and visual impacts, as well as cost. Stakeholder input is an important part of our planning process. Of the two potential routes considered, we believe the preferred route is the best solution. The alternate route also presents a viable alternative. Neither of these options have been approved. We intend to submit both routes in our facilities application to the AUC.

Preferred route

We have identified the route south of Township Road 80 as the preferred route, which is shown in red on the attached maps. The preferred route is approximately 2.6 kilometres long and has no residences within 800 metres and has low visual impacts. This route also has low agricultural and environmental impacts, as well as fewer structures when compared to the alternate route.

Alternate route

The route north of Township Road 80, shown in green on the attached maps, has been selected as the alternate route. The alternate route is also approximately 2.6 kilometres long and shares segments with the preferred route directly east of the Whitla Substation and directly south of the Maleb Substation. The alternate route also has no residences within 800 metres and low visual, agricultural and environmental impacts. Based on stakeholder feedback, this route has been shifted approximately 15 metres north of the original alignment to accommodate farming operations.

The route segment between designation points B30-B20-A20, which is outlined in grey on the attached map is no longer being considered based on agricultural impacts and stakeholder input.

Transmission structures

The proposed single circuit 240 kV transmission structures will:

- be two-pole and three-pole structures
- be steel
- be approximately 17 to 25 metres tall
- have a distance between structures of approximately 160 metres
- have a right-of-way approximately 30 metres wide on private property



Two-pole H-frame steel structure similar to the proposed



Three-pole corner wood structure similar to the proposed steel structure

Easements, off rightof-way access and
construction workspace
Additional temporary workspace,
outside of the right-of-way in
certain areas may be required in
order to access and construct the
transmission line. The temporary
construction workspace is
intended to be primarily used
for equipment access during
construction, including the
potential stringing areas located
behind some corner structures.

The temporary construction workspace will be discussed with landowners prior to, and during construction of the line. Additional right-of-way for the purposes of guy wires for corner structures will also be required.

How to provide your input

We will contact landowners. residents and occupants near the proposed transmission line project to gather input and address questions or concerns. 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. 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 Public involvement in a proposed utility development.

INCLUDED IN THIS INFORMATION PACKAGE:

- Project map
- AESO Need Overview
- AUC brochure: Public involvement in a proposed utility development

PRIVACY COMMITMENT



To I

AltaLink is committed to protecting your privacy. Your personal information is collected and will be protected under AltaLink's Privacy Policy and Alberta's Personal Information Protection Act. As part of the regulatory process for new transmission projects, AltaLink may provide your personal information to the 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 email privacy@altalink.ca or phone at 1-877-267-6760.



2611 - 3rd Avenue SE Calgary, Alberta T2A 7W7

Contact us

To learn more about the proposed Suncor Forty Mile Wind Power Project Connection, please contact:

ALTALINK

1-877-267-1453 (toll-free) stakeholderrelations@altalink.ca www.altalink.ca/projects

To learn more about Suncor's Forty Mile Wind Power Project and solar project, please contact:

SUNCOR

1-866-344-0178 Ext. 2 (toll-free) fortymile@suncor.com www.suncor.com/fortymilewind

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

ALBERTA ELECTRIC SYSTEM OPERATOR (AESO)

1-888-866-2959 (toll-free) stakeholder.relations@aeso.ca

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 you may contact the AESO directly. You can make your questions or concerns known to an AltaLink 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

(You can call toll-free by dialing 310-0000 before the number).

Email: utilitiesconcerns@auc.ab.ca

The Alberta Utilities Commission (AUC) ensures the fair and responsible delivery of Alberta's utility services. AltaLink submits applications for new transmission projects to the AUC and the AUC reviews them in a public process.

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www.twitter.com/altalink





Attachment 9 – TFO's Project Update Letter – Suncor Forty Mile Wind Power Project Connection (October 29, 2018)



October 29, 2018

Suncor Forty Mile Wind Power Project Connection Project update

Thank you for your ongoing participation in the Suncor Forty Mile Wind Power Project Connection. We would like to provide you with some updated project information since we last mailed information to stakeholders in August 2017, including a new anticipated schedule.

Project Background

Suncor Energy Inc. (Suncor) has requested a connection to the transmission system for their proposed Suncor Forty Mile Wind Power Project. The 400 megawatt (MW) Suncor Forty Mile Wind Power Project proposes to supply electricity to the grid via two proposed substations: the Maleb Substation and the Granlea Substation. The Maleb Substation will be connected to the grid as part of AltaLink's Suncor Forty Mile Wind Power Project Connection. The Granlea Substation will be connected to the grid as part of a different AltaLink project that is already underway, the Suncor Granlea Connection Project.

AltaLink's Suncor Forty Mile Wind Power Project Connection involves:

- Constructing approximately 2.6 kilometres (1.6 miles) of new 240 kilovolt (kV) transmission line to connect Forty Mile Granlea Wind GP Inc.'s (Forty Mile GP) proposed Maleb Substation to AltaLink's existing Whitla Substation;
- Installing one (1) 240 kV circuit breaker and other associated equipment at the Whitla Substation; and
- Installing optical ground wire (OPGW) on top of the new transmission line for protection and telecommunications purposes. A section of OPGW may be placed underground beneath an existing transmission line approximately 700 metres east of the Whitla Substation.

Updated Information

Since our last newsletter, all Suncor Forty Mile Wind Power Project assets have been transferred to a wholly-owned subsidiary of Suncor Energy Inc. called Forty Mile Granlea Limited Partnership, the general partner of which is Forty Mile GP.

In addition, Forty Mile GP has withdrawn its request to connect the Solar Power component of their proposed Project. For more information on this change please refer to the Alberta Electric System Operator (AESO) Need Overview Update (October 2018) included with this package.

Updated anticipated project schedule

File Facility Application with Alberta Utilities Commission (AUC)	December 2018
Start construction if project is approved	January 2020
Construction completed	September 2020

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.

Next Steps

As per the updated schedule above, we anticipate filing a facility application with AUC for the project in December 2018. The AUC will review the application and can approve, approve with conditions, or deny







the project. We will notify stakeholders when we file the application and again when the AUC has reached a decision about the project.

Contact us

We are available to address any questions or concerns you may have regarding the project. Please contact us at stakeholderrelations@altalink.ca or 1.877.269.5903.

Further information about this project and maps are available at: http://www.altalink.ca/projects/view/259/suncor-forty-mile-wind-power-project-connection/

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

ALBERTA ELECTRIC SYSTEM OPERATOR (AESO)

1-888-866-2959 E-mail: 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.

Sincerely,

Dave Lee

Manager, Consultation







Attachment 10 - AESO Market Participant Notification Letter (October 25, 2018)



SENT VIA EMAIL

October 25, 2018

[Notified Market Participant]
[Notified Market Participant Street Address]
[Notified Market Participant City],[Notified Market Participant Province]
[Notified Market Participant postal code]
[Notified Market Participant country (if outside Canada)]

Dear [Notified Market Participant Primary Contact]:

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

The Alberta Electric System Operator (AESO) would like to advise you that Forty Mile Granlea Wind GP Inc. (Forty Mile GP), a wholly owned subsidiary of Suncor Energy Inc., has applied for transmission system access to connect its planned generating facility to the transmission system in the AESO's South Planning Region.

Forty Mile GP has requested two connections to the transmission system through two separate system access service requests (SASRs), each for the connection of 200 MW of capacity for the Suncor Forty Mile Wind Power Project. The AESO is addressing the SASRs through the following AESO connection projects:

- the Suncor Forty Mile Wind Power Project 964L Connection; and
- the Suncor Forty Mile Wind Power Project Whitla Connection.

Planning for the connection of the Suncor Forty Mile Wind Power Project is undertaken by the AESO as part of the AESO's Connection Process. In late 2018, the AESO plans to file separate Needs Identification Document (NID) applications for each of the above described connection projects. The AESO has produced a Need Overview document for each of the connection projects that describe the proposed transmission development to connect the Suncor Forty Mile Wind Power Project to the transmission system. Copies of the Need Overview documents are attached for your information.

The purpose of this letter is to advise you that the AESO has identified that, under some potential system conditions, the operation of the **[Notified Market Participant Facility]** may be affected following one or more connections of the planned Suncor Forty Mile Wind Power Project.¹

Connection Assessment Findings

Engineering connection assessments were carried out by the AESO in order to assess the transmission system performance following the connection of the Suncor Forty Mile Wind Power Project. The connection assessments identified the potential for system performance issues, under some future system conditions, following one or more connections of the Suncor Forty Mile Wind Power Project.

Page 1 Public

¹ The studies were performed assuming the following Rate STS, *Supply Transmission Service*, contract capacities: the Suncor Forty Mile Wind Power Project 964L Connection, Rate STS of 200 MW; and the Suncor Forty Mile Wind Power Project Whitla Connection, Rate STS of 200 MW.



Transmission Constraint Management

To mitigate these potential system performance issues, planned remedial action schemes (RASs) may be modified and new RASs may be required.

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). When applied, the TCM Rule could result in the AESO issuing directives for curtailment to source assets that are effective in managing a constraint.

The connection assessments have identified source assets, including the **[Notified Market Participant Facility]**, that are effective in mitigating the potential transmission constraints.

Renewable Generation Integration

The actual impacts of these connection projects depend on their actual energization timing, as well as the energization timing of other planned renewable generation connection projects in the area. The AESO will ensure plans are in place when impacts of the Suncor Forty Mile Wind Power Project and the other planned renewable generation connection projects in the area become certain. As mentioned in the AESO's *Transmission Capability Assessment for Renewables Integration* report, renewable integration capability could be achieved through use of RASs, which is consistent with the findings of the engineering connection assessments.

The Need for a Section 15(2) Application

If the AESO anticipates that congestion under system normal (Category A) conditions will arise on the transmission system, then the AESO is required to file and obtain approval from the Alberta Utilities Commission (AUC) 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, and will address the frequency, magnitude and duration of any anticipated congestion at that time.

For Further Information

The engineering connection assessment will be included in the AESO's Suncor Forty Mile Wind Power Project 964L Connection NID application and Suncor Forty Mile Wind Power Project Whitla Connection NID application. Following submission to the AUC of these NID applications, the NID applications 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

Yours truly,

"Electronically signed by"

Maz Mazadi, PhD, P.Eng., SMIEEE Manager, Project and System Access Studies

Attachments:

AESO Need Overview Update: Need for the Suncor Forty Mile Wind Power Project 964L Connection in the Maleb area AESO Need Overview Update II: Need for the Suncor Forty Mile Wind Power Project Whitla Connection in the Maleb area

Page 2 Public

² Available on the AESO website at: https://www.aeso.ca/assets/Uploads/Transmission-Capability-Assessment-for-Renewables-Integration-Final.pdf



Need for the Suncor Forty Mile Wind Power Project 964L Connection in the Maleb area

Forty Mile Granlea Wind GP Inc. (Forty Mile GP), a wholly owned subsidiary of Suncor Energy Inc. has submitted two applications to the Alberta Electric System Operator (AESO) for transmission system access to connect its proposed Suncor Forty Mile Wind Power Project (Facility) in the Maleb area.

One of these requests can be met by a connection to the existing Whitla 251S substation, as further described in the AESO Need Overview Update (October 2018), "Need for the Suncor Forty Mile Wind Power Project Whitla Connection in the Maleb area".

Separately, the AESO described its proposed solution to meet Forty Mile GP's other request in the previous version of this AESO Need Overview, originally distributed in October 2017. Since that time, the date the AESO intends to apply to the Alberta Utilities Commission (AUC) for approval of the need has changed. The AESO's proposed solution to connect the Facility has not changed.

Forty Mile GP's request can be met by the following solution:

PROPOSED SOLUTION

- Add one 240 kV transmission line to connect the Facility to the existing 240 kV transmission line 964L.
- Add or modify associated equipment as required for the above transmission developments.

REVISED NEXT STEPS

- The AESO intends to apply to the Alberta Utilities Commission (AUC) for approval of the need in late-2018.
- 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 Maleb 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



Need for the Suncor Forty Mile Wind Power Project Whitla Connection in the Maleb area

Forty Mile Granlea Wind GP Inc. (Forty Mile GP), a wholly owned subsidiary of Suncor Energy Inc. has submitted two applications to the Alberta Electric System Operator (AESO) for transmission system access to connect its proposed Suncor Forty Mile Wind Power Project (Facility) in the Maleb area.

One of these requests can be met by a connection to the existing 240 kV transmission line 964L, as further described in the AESO Need Overview Update (October 2018), "Need for the Suncor Forty Mile Wind Power Project 964L Connection in the Maleb area".

Separately, the AESO described its proposed solution to meet Forty Mile GP's other request in the previous version of this AESO Need Overview Update, originally distributed in August 2017. Since that time, Suncor has withdrawn its request to connect the Suncor Forty Mile Solar Power Project and the date the AESO intends to apply to the Alberta Utilities Commission (AUC) for approval of the need has changed. The AESO's proposed solution to connect the Facility has not changed.

Forty Mile GP's request can be met by the following solution:

PROPOSED SOLUTION

- Modify the existing Whitla 251S substation, including adding one 240 kilovolt (kV) circuit breaker.
- Add one 240 kV transmission line to connect the Facility to the Whitla 251S substation.
- 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 late-2018.
- 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 Maleb 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



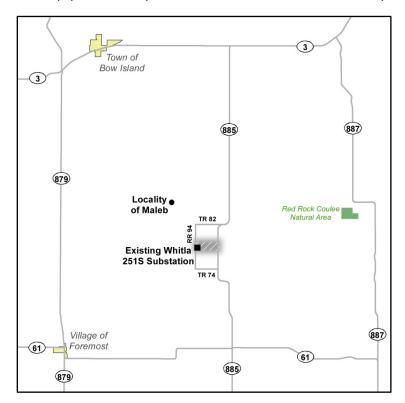


Notification of Needs Identification Document Filing Addressing the Need for the Suncor Forty Mile Wind Power Project Whitla 251S Substation Connection in the Maleb Area

The Alberta Electric System Operator (AESO) advises you that it intends to file a Needs Identification Document (NID) for the Suncor Forty Mile Wind Power Project Whitla 251S Substation Connection with the Alberta Utilities Commission (AUC) on or after December 5, 2018.

Forty Mile Granlea Wind GP Inc. (Forty Mile GP), a wholly owned subsidiary of Suncor Energy Inc. has applied to the AESO for transmission system access to connect its proposed Suncor Forty Mile Wind Power Project (Facility) in the Maleb area. Forty Mile GP's request can be met by the following solution:

- Modify the existing Whitla 251S substation, including adding one 240 kilovolt (kV) circuit breaker.
- Add one 240 kV transmission line to connect the Facility to the Whitla 251S substation.
- Add or modify associated equipment as required for the above transmission development.



The black square on the map indicates the approximate location of the existing Whitla 251S substation, which is at NW-33-7-9W4. The shaded area on the map indicates the approximate location of the proposed transmission development, including the 240 kV transmission line. The specific transmission facilities may extend beyond the shaded area shown.

AltaLink Management Ltd. is the transmission facility owner (TFO) in the Maleb area. In April 2017, the AESO and the TFO began presenting this need to stakeholders, including residents, occupants, and landowners. The AESO will apply to the AUC for approval of the need for this transmission development. Once filed with the AUC, the NID will be posted on the AESO website at https://www.aeso.ca/grid/projects/suncor-forty-mile-wind-power-project-whitla-connection/

In a separate application, called a Facility Application, the TFO will provide more details about the specific facilities associated with the AESO's proposed transmission development, and will request AUC approval to construct and operate these facilities.

For more information, please visit our website, <u>www.aeso.ca</u> or contact us at 1-888-866-2959 or stakeholder.relations@aeso.ca





AESO Stakeholder Newsletter

GRID

Suncor Forty Mile Wind Power Project Whitla 251S Substation Connection – Notice of Filing

Forty Mile Granlea Wind GP Inc. (Forty Mile GP), a wholly owned subsidiary of Suncor Energy Inc., has applied to the AESO for transmission system access to connect its proposed Suncor Forty Mile Wind Power Project (Facility) in the Maleb area. Forty Mile GP's request can be met through the following solution:

- Modify the existing Whitla 251S substation, including adding one 240 kilovolt (kV) circuit breaker
- Add one 240 kV transmission line to connect the Facility to the Whitla 251S substation
- Add or modify associated equipment as required for the above transmission developments

The AESO intends to file the Suncor Forty Mile Wind Power Project Whitla 251S Substation Connection Needs Identification Document (NID) application with the Alberta Utilities Commission (AUC) on or after Dec. 5, 2018, requesting that the AUC approve this NID.

The AESO has posted the Notification of NID filing 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 > Project > Suncor Forty Mile Wind Power Project Whitla Connection to see all the relevant documents including the NID application once it is filed with the AUC.